Digitized by the Internet Archive
in 2014

https://archive.org/details/b19974760M2439

THE CHEMIST AND DRUGGIST

ESTAB. 1859

REGISTERED AS A NEWSPAPER.

TELEPHONE: CENTRAL 3617
TELEGRAMS: "CHEMICUS, CANNON, LONDON" (2 Words)

PUBLISHED WEEKLY AT 42 CANNON ST., LONDON, E.C.4.

SUBSCRIPTION WITH DIARY 20/- PER ANNUM.
SINGLE COPIES 9d.

No. 2338. NOVEMBER 15, 1924. Vol. CI.

Packed in attractive cartons of 1 dozen.

THE CATCH OF THE SEASON

A New Winter Line

Cost 6/6 doz. net. Sell at 1/- per tin
ON THE P.A.T.A.

MEGGESON & CO., LTD.
BERMONDSEY :: :: LONDON, S.E.16

Makers of Medicated Lozenges and Pastilles for more than 100 years.

Experience does count.

STOVAINE

THE LEAST TOXIC OF LOCAL ANÆSTHETICS

USED IN THE SAME WAY AND AS EFFICACIOUS AS COCAINE

Does not create a habit and does not give rise to headaches, nausea, vertigo, or syncope. :: :: *Literature on demand.*

NO HOME OFFICE LICENCE REQUIRED

Cheaper than Novocain and Benzocain. Supplies now obtainable from the sole British Agents.

MAY & BAKER, LTD., Battersea, London, S.W.11

Manufacturers: **LES ETABLISSEMENTS POULENC FRÈRES, PARIS.**

Index to Advertisers, pp. 5 & 6.

Just a Few Lines—
"Graesanto"

GM

PURE PHENOL 40/41°C.

ACID CARBOLIC ICE CRYSTALS

PURE CRESOLS

ACID CARBOLIC DETACHED CRYSTALS

CRESYLIC ACIDS

ACID CARBOLIC LIQUEFIED CRYSTALS

SALICYLIC ACID

PHENOL & CRESOL DERIVATIVES

ACROSYL (SAPONIFIED CRESOL)

ENQUIRIES
Dept. A

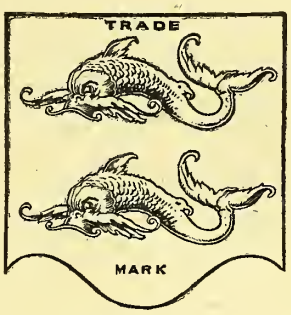
The
GRAESSER-MONSANTO
CHEMICAL WORKS
LIMITED

WORKS (ESTD. 1867)
REGISTERED OFFICE—
RUABON, N. WALES

39 BILLITER BUILDINGS
BILLITER STREET
LONDON - E.C.3

AMERICAN ASSOCIATES AND REPRESENTATIVES:
MONSANTO CHEMICAL WORKS
ST. LOUIS, U.S.A.
NEW YORK CHICAGO

The Dolphin Series



# of Household Remedies

Designed with the primary idea of turning the many requests for "pennyworths" and "ounces" into sales of greater value to the chemist.

It embraces a wide range of everyday requirements and will be increased on demand. A high standard of pharmaceutical excellence is maintained and the get-up is one of distinctive dignity. The fine quality of the flint bottles, the well printed labels and the neat capping, all emphasise the appeal for the payment of the slightly higher sum which will secure the better article and the more profitable sale for the chemist.

PRICE LIST

AMMONIATED TINCTURE of QUININE, B.P. Stoppered Bottles.
1 oz. **7/9** per dozen
2 ,, **11/3** ,, ,,

CAMPHORATED OIL, prepared with Olive Oil.
1 oz. **4/6** per dozen
2 ,, **6/3** ,, ,,
4 ,, **9/6** ,, ,,

CASTOR OIL, absolutely tasteless.
1 oz. **3/6** per dozen
2 ,, **4/3** ,, ,,
4 ,, **6/-** ,, ,,

CHERRY COUGH SYRUP, specially suitable for children.
2 oz. **5/6** per dozen
4 ,, **7/9** ,, ,,

EASTON'S SYRUP, B.P.
2 oz. **6/3** per dozen
4 ,, **10/3** ,, ,,

EUCALYPTUS OIL, B.P.
1 oz. **5/-** per dozen
2 ,, **7/9** ,, ,,

GLYCERIN, finest double distilled.
1 fl. oz. **3/6** per dozen
2 ,, **4/9** ,, ,,
4 ,, **7/6** ,, ,,

OLIVE OIL, finest Lucca.
Reputed ¼ pt. **6/-** per dozen
½ ,, **10/6** ,, ,,

SAL VOLATILE, Stoppered bottles.
1 oz. **8/3** per dozen

WORM SYRUP. Sine Santonin.
1 oz. **7/6** per dozen

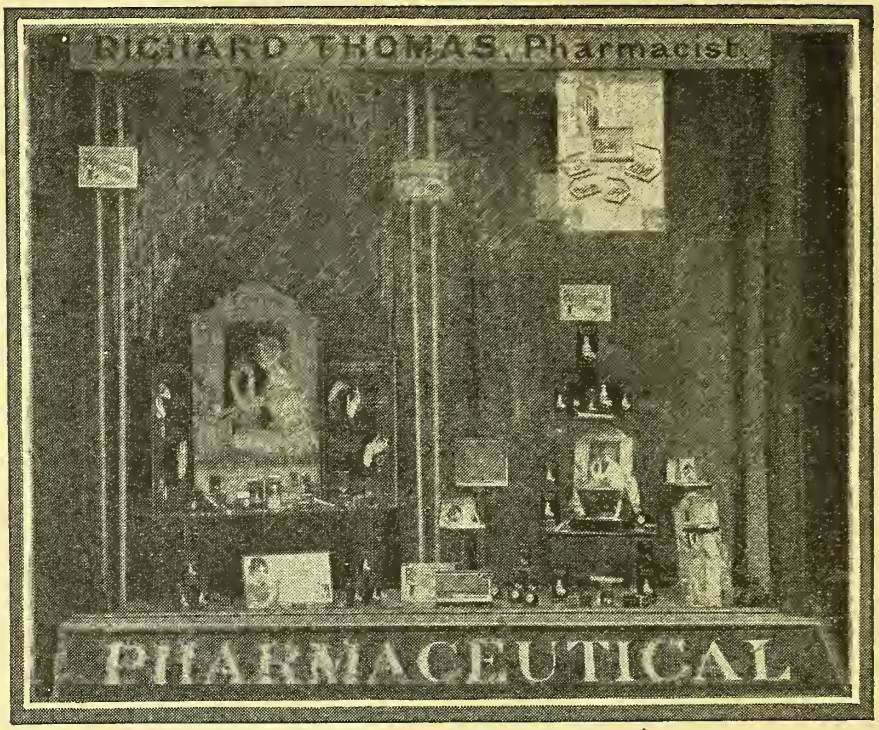
Name and address printed on **10/-** of any one line, or, assorted with other goods, minimum 6 dozen. **£2** consignments delivered free in Great Britain. Free samples on application.

ARTHUR·H·COX·&·CO·LTD

Manufacturing Chemists

BRIGHTON·ENGLAND

Established 1839.



The above photograph shows an actual window display, now showing in the window of a well-known London chemist. All of this material is given absolutely free, together with special window display terms. Write to the wholesale agents, Quelch & Gambles, Limited, 211/215, Blackfriars Road, London, S.E.1

The growing importance of manicure specialties in the chemist's shop

A new department built up on Cutex advertising

Five years ago manicure specialties were of importance only to those chemists whose shops were located in districts which provided a large percentage of transient trade. It was necessary to carry a few items such as files, emery boards and probably an assortment of manicure scissors to supply an occasional customer.

To-day the situation is very different. Hundreds of thousands of women now consider that the care of the hands is as important as any other function of

personal cleanliness. Hundreds of thousands of new customers have been created for the various manicure specialties which are now available and which are heavily advertised in the public press.

This has all come about as the result of advertising of Cutex—first the Cuticle Remover, which women are now using instead of the cuticle scissors; then the Cake Polish, Powder Polish, Liquid Nail Enamel, Cuticle Comfort, and finally the attractive Cutex sets which are becoming more and more popular every day.

In order to assist the chemist in bringing his Cutex specialties to the attention of his own customers, we are supplying for the Christmas season a highly attractive window display, pictured on the opposite page. All of the display cards and dummy cartons are absolutely free to the retail trade.

Parcels for special window display terms can be made up from the following list in any assortments desired

No.		Per doz.	P.A.T.A.
1	CUTEX Cuticle Remover	18/-	2/-
2	CUTEX Cuticle Remover	36/-	4/-
4	CUTEX Nail White	18/-	2/-
5	CUTEX Polish Cake, White ...	18/-	2/-
6	CUTEX Polish Cake, Pink ...	18/-	2/-
7	CUTEX Polish Cake, Trial Size	6/9	9d.
8	CUTEX Polish Powder	18/-	2/-
9	CUTEX Polish Paste, Pink ...	18/-	2/-
10	CUTEX Polish Paste, Plain ...	18/-	2/-
11	CUTEX Liquid Nail Enamel ...	18/-	2/-
12	CUTEX Liquid Nail Enamel ...	6/9	9d.
13	CUTEX Cuticle Comfort	18/-	2/-
16	CUTEX Compact Set	27/-	3/-
17	CUTEX Travelling Set.....	84/-	9/6
18	CUTEX Boudoir Set 168/-		19/-
19	CUTEX Five-Minute Set	54/-	6/-
24	CUTEX De Luxe Set 270/-		30/-
25	CUTEX Marquise Set 135/-		15/-
22	CUTEX Polish Stick	9/-	1/-
37	CUTEX Emery Boards	6/6	1/-

In addition special display terms are offered for direct orders, on parcels of 30s., £3 and £5. Such parcels can be made up of an assortment from the list given herewith.

Don't wait for our travellers to call, but write and ask for details regarding these special window display terms. These will be sent to you direct.

CUTEX

Manicure Specialties

Write to the wholesale agents:

Quelch & Gambles Ltd.,
211-215, Blackfriars Rd.,
LONDON, S.E.1

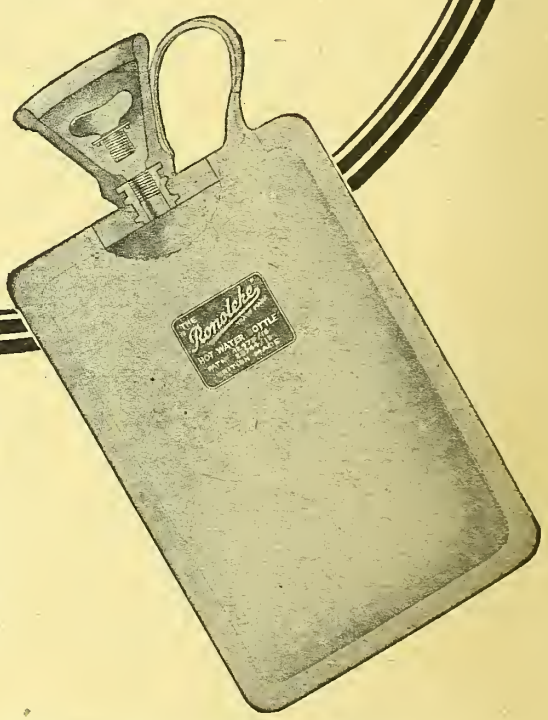
The bottle without rival

The Ronoleke Hot Water Bottle has undoubtedly come into its own. Pharmacists and their customers are showing their appreciation in tangible fashion, for "Ronolekes" please the customer immensely, and they pay you—well. We speak of the Ronoleke's success because it is an actuality and we want you to join us in this—your best hot water bottle proposition.

You know the Ronoleke—the perfectly water-tight bottle, no wiring, washers or leakage. Infinitely stronger and perfect in every detail. The prices, too, are right, and all are on the P.A.T.A., leaving you a very handsome margin indeed.

An extensive scheme of advertising is now running in the leading magazines, and we want you to clinch many sales by putting in a display. You will be surprised with the results.

THE BEST AND MOST RELIABLE HOT WATER BOTTLE.



	SUPER RED		DRAB	
Size	Wholesale Prices	Retail Prices	Wholesale Prices	Retail Prices
8×10	5/-	7/6	4/8	6/6
8×12	5/9	8/6	5/3	7/-
10×12	6/6	9/9	6/-	8/-

Stock the Ronoleke. Send along your order now. £5 orders and over less 5% plus a further 5% for prompt cash.

OBTAINABLE FROM ALL WHOLESALERS AND SUNDRIESMEN, ETC.

INDEX TO ADVERTISERS

Addis, R., & Son (Toothbrushes) 18
Alnite Co., Ld. (Alnite Hot Pad) .. 16
Anglo-American Oil Co., Ld. (Petroleum Jelly) xxv
Association of Manfg. Chemists, Ld. xx-Col. Supp.
AutoStrop Safety Razor Co., Ld. (Valet Safety Razors) 28
Ayrton, Saunders & Co., Ld. (Wholesale Druggists) 15
Baker Metal Stopper Co. xxii
Barker, Drabble & Co. 42
Barker, R., & Son, Ld. (Infants' Preservative) 37
Battin, R., & Co., Ld. (Irish Moss, &c.) ii
Beaverpuf, Ld. (Powder Puffs) 25
Bengue, Dr., & Co. xviii
Benton-Smith, Ld (Perfume) 22
Berdoe & Fish (Valuers, &c.) .. Col Supp.
Berk, F. W., & Co., Ld. (Acids, &c.) vi
Berton, Arthur, Ld. (Surgical Dressings, &c.) 29
Betts & Co., Ld. (Coll. Tubes) xxiii
Bidwell, Bidwell & Co., Ld. (Brush Set) 28
Bingham, W. E., & Co. (Toilet Goods) 28
Blythe, W., & Co., Ld. (Chemicals).. ix
Borax Consolidated, Ld. viii
Boxfoldia, Ld. (Cartons, &c.) xxii
Brierley, J. ..... Col. Supp.
British Diamalt Co. (Extract of Malt) 38
British Dyestuffs Corporation, Ld. .. v
British Electrical Development Co. xxi
British Optical Institute, Ld. 42
British Wolmuth Sanawaves Co., Ld. xiv
Brooks, J., & Co., Ld. (Pharmaceutical Preparations, &c.) ii
Brunner, Mond & Co., Ld. (Alkalies) v
Buckley Bowker Tablet Co. viii
Burge, Warren & Ridgley, Ld. (Ointment Boxes) 31
Burrough, J., Ld. (Absolute Alcohol) Text
Burroughs Wellcome & Co. (Quinine Sulphate) 47
Bnsh, W. J., & Co., Ld. (Perfumery) 13
Cadbury Bros. (Cocoa) ..... Cover
Cartwright, W. B., Ld. (Elfrida Preps.) ..... Cover
Central College of Optics 46
Christy, T., & Co. (Grips Pastilles, Pyshan Points Tea, &c.) 8-46
Coleman & Co., Ld. (Wincarnis) 36
Connell, A., & Co. (Essences, &c.) 12
Cooper, Son & Co., Ld. (Cachets) .. xviii
Cox, Arthur H., & Co., Ld. (Dolphin Series) 1
Crookes Laboratories (Collosol Ferromalt) xviii
Cuxson, Gerrard & Co., Ld. (Cod Liver Oil) 37
Dederich, W., Ld. (Pharml. Preps.) xviii
De Jongh, Dr. (Cod Liver Oil) 37
De, S. N., M.Sc. (Podophyllin, &c.) .. x
Dearborn (1923), Ld. (Toilet Specialities) 20
Denver Chemical Manfg. Co. (Antiphlogistine) xiii
Dick, W. B., & Co., Ld. (Liquid Paraffin) xxiv
Dickeson, R., & Co. (Besorbon) .. xviii
Drake, F., & Co. (Perfumery) 14
Dudley & Co. (Window Tickets, &c.) 46
Eastern & Russian Trading Co., Ld. (Santonin, &c.) ..... Cover
Edwards, Wm., & Sons (Xmas Lines) 21
Elfin Flasks 31
Elliman's Embrocation xv
Evans, Adlard & Co., Ld. (Filter Papers) xxii
Evans, Gadd & Co., Ld. (Confellax) xii
Evan-Williams Co., Ld. (Henna Shampoos) 28
Field, C. W., Ld. (Saponine Powder, &c.) x
Fink, F., & Co. (Gums) 46
Florian & Armand, Ld. (Complexion Powder) 23
Galen Manfg. Co., Ld. (Ebony Toilet Articles) 46
Garfield Tea Co. xiii
General Electric Co., Ld. (Osram Lamps) 43
George, E. J. (Valuers, &c.)..Col. Supp.
Glaxo (Food) ..... Text
Goodall, Backhouse & Co. (Cod Liver Oil, &c.) 32-46
Gordon, H. (London), Ld. (Surgical Sundries) 32
Gower, J. (Books) ..... Col. Supp.
Graesser-Monsanto Chemical Works, Ld. (Chemicals) ..... Cover
Greeff, R. W., & Co., Ld. (Chemicals) 9
Grip-Tight Soother 30
Grout & Co., Ld. (Norvic Crêpe Bandage) 32
Harker, C. R., Stagg & Morgan, Ld. (Peldo) 24
Harley, T. (Rat Poison) 44
Harwood Bros. (Pipes) 44
Havill, G. (Bottles) 46
Haynes, G., & Co. (Surgical Dressings) 30
Hill, Wm., & Co. (Proprietaries) .. xiv
Himrod Manfg. Co. (Asthma Cure) xiii
Honeywill Bros., Ld. (Alcohol) xx
Hooper & Co. (Chemists' Sundries) 32
Horner, L. A., & Sons (Drugs, &c.) .. ii
Howards & Sons, Ld. (Agotan) i
Johnson & Sons (Mfg. Chts.), Ld. (Chemicals) iii
Johnston & Adams (Slipperine) xx
Josephs, Philip, & Sons, Ld. ..Col. Supp.
Keene Laboratories (Corn Cure) 33
Kent, G. B., & Sons, Ld. (Brnshes) 40
Kerfoot, T., & Co., Ld. (Distol Ottos) 17
King, J. C., Ld. (Window Display Papers) 46-xxiii
Lamb & Watt, Ld. (Wines) 34
Lambert, Sami., & Co., Ld. (Crude Drugs) x
Lang, Jules, & Son (Glassware) 40
Langley-Smith & Co. (Motor Oils) .. xxiv
Laporte, B., Ld. (Chemicals) vi
Lautier Fils, Ld. (Ess. Oils) 12
Lax & Shaw, Ld. (Bottles) 39
Leigh, R. & H., & Son, Ld. (Carboy Stand) xxii
Lejeune, G. A. (Showcards, &c.) .. 44

[*Continued overleaf.*

A proved best seller

PEARS
SOLID
BRILLIANTINE

One of *Pears'* Golden Series.

This Brilliantine achieved popularity immediately it was introduced. It has sold exceedingly well ever since.

So much better are lines like this than those products for which no proved demand exists. Pears' Brilliantine fills a known demand — there is no element of risk in stocking it.

It's fine fragrance, its 'clean' appearance — its quietly artistic container—these things have made Pears' Brilliantine a "best seller."

The margin of profit is wide. It pays to sell Pears' Brilliantine.

A. & F. PEARS, Ltd., 71-75, NEW OXFORD STREET, LONDON, W. C. 1.

INDEX—cont.

Lennon, Ld. (Drugs) xii
Levermore, A., & Co., Ld. (Precipitated Chalk) 46
Lewis, H. R., & Co., Ld. (Books) .. xx
Licenses and General Insurance Co., Ld. xx
Lissman, M. L., & Co. (Gillette Brownie Razors) 28
Livermore & Knight, Ld. (Embossed Gummed Paper Seals & Labels) .. xxii
Lorimer-Marshall, Ld. (Perfumery and Sachets) 25

MacLellan, G., & Co., Ld. (Hot Water Bottles, &c.) 46
MacSweeny, E. (Tinori Corn Cure) .. 46
Matthews, D., & Son ..... Col. Supp.
Matthews, Stephen, & Co., Ld. (Curicones) xiv
Maw, S., Son, & Sons, Ld. 11
Mawson Filter Co. (Optimus Filters) 40
May & Baker, Ld. (Stovaine) .. Cover
Medical Supply Assocn., Ld. (Medical Electric Apparatus) xxvi
Meggeson & Co., Ld. (Sore Throat Lozenges) ..... Cover
Merkham Trading Co., Ld. (Artifex Hair Wavers and Curlers) 26
Milkal, Ld. (Dried Milk) 35
Millar, A., & Co., Ld. (Orange Wine) 36
Millard Bros., Ld. (Electric Batteries, &c.) xxii
Mills, A. J., & Co., Ld. (Honey) 38
Mitchell, N. W., & Sons, Ld. (Corks) 40
Mycromet Manfg. Co. (Menthol Cones) x

National Cash Register Co., Ld. .. 41-42
Newball & Mason (Wine Essences) .. 34
Newbery, F., & Sons, Ld. (Druggists' Sundries) 26
Olley, C., & Sons, Ld. (Corks) 45
O-Pine-O Manfg. Co., Ld. (Toilet Preps.) 46
Orridge & Co. (Valuers, &c.) .. Col. Supp.
Osborne, Bauer & Cheeseman (Glymiel Jelly) 27
Osborne, Garrett & Co., Ld. (Manicure Sets, &c.) 7

Papier Poudré, Ld. (Toilet Preps.).. 28
Parks, Davis & Co. (Cod Liver Oil Emulsion) xix
Pears, A. & F., Ld. (Solid Brilliantine) 5
Penney & Co., Ld. (Toilet Preps.) .. 26
Piesse & Lubin, Ld. (Perfumery) .. 22
Pindar, J. W., & Co. (Pill Machinery) xxii
Plaistowe & Co., Ld. (Sandalwood Oil) 14
Provincial Insurance Co., Ld. .... Text
Prunol, Ld. (Prune Jelly) xviii

Quelch & Gambles, Ld. (Manicure Specialties) 2-3

Rankin & Co. (Head Ointment) xvi
Ransom, W., & Son, Ld. (Extracts, Tinctures, &c.) ..... Cover
Ratcliffe, Geo. (Lozenges, &c.) x
Red Band Chemical Co. (Magnesia) viii
Reuter, R. J., Company, Ld. (Vegetable Leaflets) 20
Roberts & Co. (Tonic) xvi
Robinson & Sons, Ld. (Boxes) .. Text
Ronoleke Hot Water Bottles 4
Rose, J. L., Ld. (Pyrogallic Acid) .. x
Royle, J. W., Ld. (Mineral Waters).. 36
Rudduck & Co. (Shopfittings).. Col. Supp.

Sage, F., & Co., Ld. (Shopfittings).. xxi
Scholl Manfg. Co., Ld. 32
Scott, A., Ld. (Ebony Toilet Articles) 27
Scruton, Oscar, & Co. (Nurse Harvey's Mixture) 37
Scurr, C. A. (Optical Tuition) 42
Shadeine Co. (Hair Dyes) 46
Sherley, A. F., & Co., Ld. (Dog Medicines) 44
Single, Dalby & Co. (Chicago Hair Dye) 22
Slack, A. Bernard ..... Col. Supp.
Smith, Martin H., Co. (Ergoapiol) xiii
Smith, T. & H., Ld. (Chemicals) ii
Smith, W. (Bottles) 45
Soc. Voor Chemische Industrie (Theobromine, &c.) xii
Solazzi (Liquorice) x
Solport Bros., Ld. (Poudre Compacte) 24
Sontheimer & Co. (Chemicals) xii
Spatula Publishing Co. (Books) .. xx

Spurway et Cie, Ld. (Perfumery) .. 12
Stambois, L. J. (Gillette Blades) 46
Stedman's, Dr., Teething Powders .. xx
Sterns, Ld. (Oils, Petroleum, &c.) Text
Stockport United Chemical Co., Ld. (Tetralene Soap) 24
Sturge, J. & E., Ld. (Precipitated Chalk) iv
Surgical Hosiery Co., Ld. (Seamless Hosiery) 30
Taranto, J., & Fils (Opium) viii
Tatcho-Tone Co. 46
Thompson, John (Wholesale Druggists 1921), Ld. (Olive Oil) 6
Thompson & Capper, Ld. (Quinphos) xvii
Tipper, B. C., & Son (Veterinary) .. 44
Tolnoco Handkerchief Co., Ld. (Paper Handkerchiefs) 30
Tolkien, C., & Co. (Malt Extract, &c.) 38
Tomlinson & Hayward, Ld. ..... Text
Toogood, Wm., Ld. (Bed Pans, &c.) 10
Townsend, J., & Sons (S.V.R.) xxiii
Trufood, Ld. (Foods) 34
Tye, J., & Son (Capsules) xvi

Viscose Development Co., Ld. (Bottle Cappings) 45
Vitmar, Ld. ..... Text

Wallace Heaton, Ld. (Enlarging, &c.) 42
Wards (Gillette Razors) 40-45
Warrick Bros., Ld. (Chemicals) .. 48
Washington Chemical Co., Ld. (Magnesia) iv
Watney, J., & Co., Ld. (Grain Spirit) xxiv
Westminster College of Pharmacy .. 42
Wheeler & Huisking, Ld. ix
Whiffen & Sons, Ld. (Fine Chemicals, &c.) vii
Willows, Francis, Butler & Thompson, Ld. (Drug Grinders, Disinfectants, Foods) ix
Woodward, W., Ld. (Gripe Water) .. 43
Woolley, Jas., Sons & Co., Ld. (Wholesale Druggists) 19
Wyleys, Ld. (Neuracetin Pellets) Cover

Zeal, G. H., Ld. (Clinical Thermometers) 31
Zimmermann, C., & Co. (Chem.), Ld. (Asthmolysin) xi

Jaytee's

FINEST QUALITY

Pure Olive Oil

Huile d'Olive de Provence.

SPECIALLY PREPARED FOR SALADS AND MEDICINAL USE

Packed in reputed ¼, ½ and 1 pint sizes. Prices on request.

We can now offer attractive packings of "OWN NAME" labels. Ask us for particulars.

John Thompson (Wholesale Druggists 1921) Ltd.

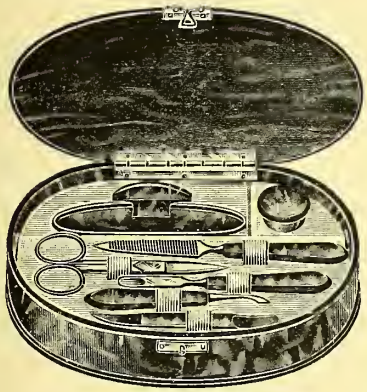
Telephone: ROYAL, 1434 (3 lines)

LIVERPOOL

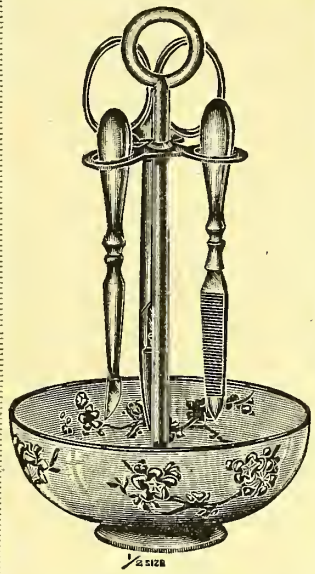
Telegrams: "DRUGS, LIVERPOOL."

CASES OF MANICURE FOR XMAS

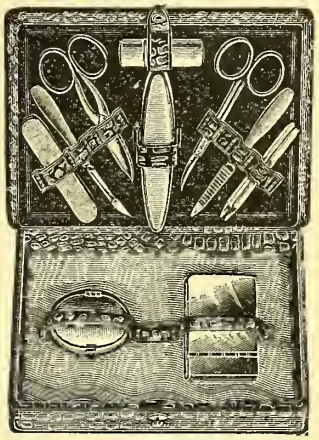
CALL AND SEE OUR NUMEROUS SELECTION



No. 2. Imitation Shell Case and Fittings, Oval Shape, 7 piece, **30/-**



Carlton-Ware Bowl.
A Pretty Adornment for Milady's Dressing Table.
No. P601. E.P.N.S., **8/6**
No. 7463. Silver, **13/6**

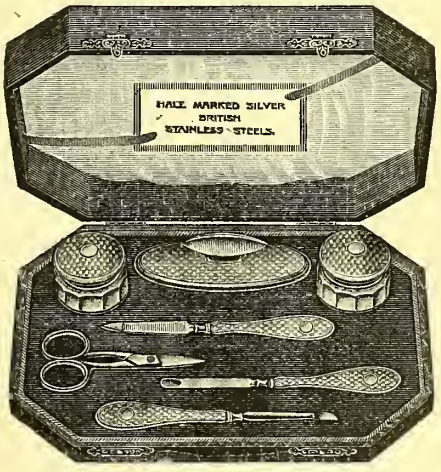


No. 3845. Gilt Fittings, 10 piece, Velvet Crocodile Case, **21/6**
No. 3845. Velvet Calf Case, **25/-**

No. 499. 12 piece, Imitation Shell Fittings, Mirror Back, **15/-**

NOTE TO CHEMISTS

We hold a very large stock of manicures—in flat, fold-up, roll-up. Stands. In ebony, bone, ivory, shell, pearl and coloured handles.

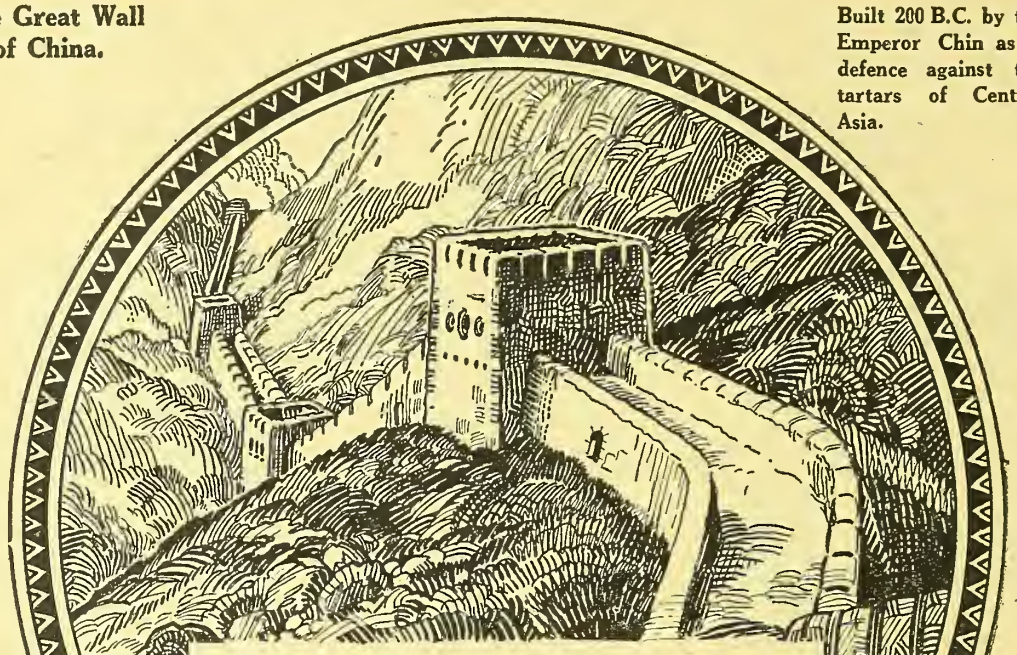


No. S480. 7 piece, Plain Silver, Stainless Steel Tools, **25/-**
No. S480. Engine Turned, as Illustration, **35/-**

OSBORNE GARRETT & CO. Ltd., 51/54 Frith St., Soho, London, W.1.

The Great Wall of China.

Built 200 B.C. by the Emperor Chin as a defence against the tartars of Central Asia.



Widespread. far-reaching.

THE Great Wall of China extends over 2,500 miles through the wildest and most inaccessible parts of the mountains, and is the most stupendous structure ever raised by human hands.

* * * * *

The sales of **"GRIPS" First-Aid Pastilles** during the last quarter of a century have so increased that there is now hardly a town or village in the British Empire where they are not sold. They occupy the premier position among medicated sweetmeats, with sales more than double those of any other pastille in the World.

Their popularity as the public's first line of defence is a fitting tribute to British enterprise, skill and quality.

'GRIPS'

FIRST-AID PASTILLES.

MADE BY LIGHTBOWNS OF ACCRINGTON.

Distributing Agents to the Wholesale & Retail Chemists' Trades:
THOS. CHRISTY & CO., 4-12 Old Swan Lane, LONDON, E.C.4.

Menthol, Eucalyptus and Liquorice. Antiseptic and Warming.

The only Nationally Advertised Medicated Sweetmeat.

"SAUROLO"

ICHTHYOL
SUBSTITUTE
(Ammon: sulpho ichthyolicum)

also

RAW SAUROLO
for veterinary use

Manufactured by

S. A. Miniere Scisti Bituminosi
Di Meride E. Besano,
Meride (Suisse).

"RHODIA" *Brand*

ANTI-PYRETICS
GUAIACOL PRODUCTS
PHOTOGRAPHIC
CHEMICALS
SALICYLATES
VANILLIN
and other fine chemicals.

Manufactured by

SOCIÉTÉ CHIMIQUE
DES USINES DU RHÔNE,
PARIS.

QUININE and SALTS

QUININE DICARBONATE
QUININE ETHYLCARBONATE
CINCHONIDINE
CINCHONINE
QUINIDINE
QUINOIDINE
} AND SALTS

Manufactured by the

BANDOENGSCHE KININEFABRIEK
AMSTERDAMSCHE CHININEFABRIEK
NEDERLANDSCHE KININEFABRIEK

Apply to

Tel. No. City 6550 (8 lines)

R. W. Greeff & Co. Ltd.
THAMES HOUSE. QUEEN STREET PLACE, LONDON, E.C.4.

Tel. Add. "Greeff, Cannon, London."

Branch Office
PARSONAGE CHAMBERS, 3, PARSONAGE, MANCHESTER
Tel. No. City 5706/7. Tel. Add. Greeff, Manchester.

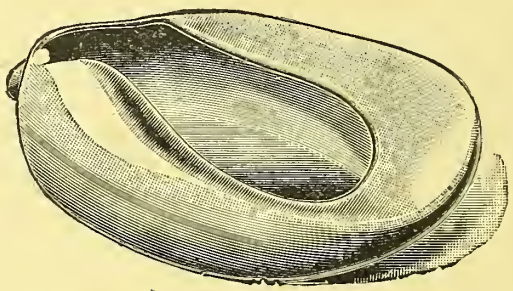
For full particulars of Invalid Requisites and other Sundries see our Price List

REDUCED PRICE

No. 77

IMPROVED

BED & DOUCHE PAN



Large Size

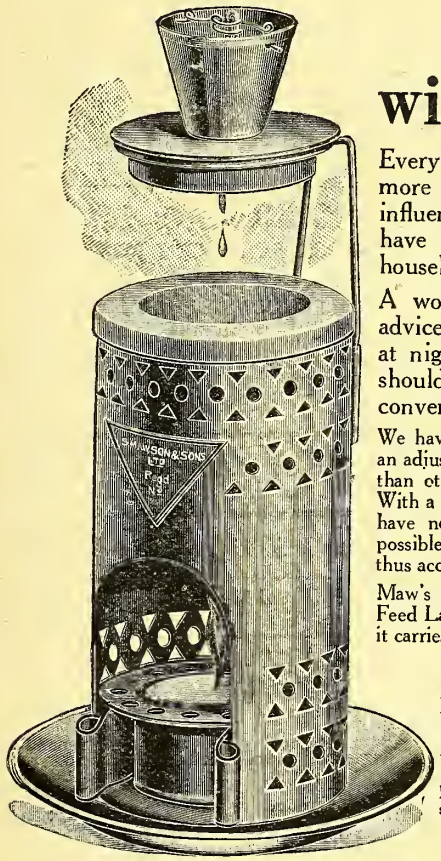
7/9 each

90/- per dozen

SUBJECT TO USUAL TERMS.

WILLIAM TOOGOOD LTD
77 SOUTHWARK ST LONDON SE1

Maw's Page



A Winter Line with Repeat Business

Every season our Drip-Feed Vapour Lamp becomes more and more popular. The recurring epidemics of influenza, whooping coughs and other winter ailments have made it almost indispensable to the average household.

A worried mother will often go to her chemist for advice because her child has such difficulty in breathing at night, and in such cases Maw's Drip-Feed Lamp should be recommended. For efficiency, safety and convenience it is without equal.

We have recently added a further improvement to the lamp. It is an adjustment for the night light. Some night lights burn better than others and therefore vaporize the liquid more satisfactorily. With a weak night light the lamp does not vaporize so well, We have now designed a simple spring arrangement by which it is possible to move the night light closer to the vaporizing tray and thus accelerate the vaporization.

Maw's Aero-Cotarol which is sold in conjunction with the Drip-Feed Lamp is a line which brings in constant repeat business and it carries a profit which makes it well worth while.

PRICES.

		Wholesale.	Retail.
Drip-Feed Lamp	...	20/- doz.	2/6
In 3 doz. lots	...	19/- ,,	
Aero-Cotarol.	Large size	18/- ,,	2/3 per bottle.
,,	Small size	10/- ,,	1/3 ,,

Night Lights specially suitable for the Drip-Feed Lamp. In boxes of six. Per doz. boxes, 6/- Maw's Drip-Feed Lamp is protected by Patents No. 170463 and 12433/24.

N.B.—Heat adjustment springs supplied free for your present stock of lamps on application.

S. Maw, Son & Sons, Ltd.,
Aldersgate St., London,
and Barnet.

Telephone: City, 7891-3 Private Branch Exchange

Telegrams: Eleven Cent London

TRADE MARK

Cables: Eleven London

Code: A.B.C. 4th & 5th Edition

PARFUMERIE

Gold Medal. Cannes DE L'ILE NOTRE DAME Philadelphia

The present tendency is away from the heavier and cruder types of Eastern perfume, and towards the more delicate and refined floral types.

"The last word in Lilac Perfumes."

Lilas

Lilas

(SPURWAY).

Appeals to the most fastidious taste.

In dainty bottles, with artistic show-cards and display material.

SPURWAY ET CIE. LIMITED.

89 GREAT EASTERN ST. LONDON, E.C. 2.

Telegrams: "Neroli, London."
Telephone: Bishopsgate 1372.

Factories & Distilleries: Cannes-Grasse, Riviera.
Technical Laboratories: Paris.

NEW YORK. LEIPZIC. KINGSTON (ONTARIO)

ESSENCES

HIGHEST CONCENTRATION.

Sole Agents for Gt. Britain and Colonies
FOR
FRIES & BRO. NEW YORK
The World-Renowned Makers of
FIRST QUALITY ESSENCES.

Stocks in London.

PEACH
APRICOT
HONEY
MAPLE
&c.

Ask for Quotations & Samples.

A. CONNELL & CO., Melba House, WENLOCK ROAD, CITY ROAD, LONDON, N.1
Phone: Clerkenwell 7266. Tele.: "Nitrozone, Ald. London."

Established 1795.

LAUTIER FILS

Works: GRASSE (France) & BEYRUT (Syria).

Essential Oils——————Synthetics.
All Raw Materials for Perfumery.

Absinth	Laurel
Almond, bitter,	Lavender
Angelica [S.A.P.	Lemon
Basil	Mace
Bay	Melissa
Bergamot	Neroli big and Syn.
Bois de Rose femelle	Orange
Cajuput	Otto de Rose
Caraway	Patchouli
Cinnamon	Peppermint
Cloves	Rosemary
Copaiba	Rue
Costus	Sandalwood
Cubeb	Spike Lavender
Fennel	Tansy
Geranium	Tarragon
Honey	Thyme
Hyssop	Vetivert

Olive, Peach Kernel, Sweet Almond Oils
Floral Waters.

Wholesale and Export only.

LAUTIER FILS, Ltd., 4 Denman St., London Bdg., S.E.1
Tel. Add.: "Lautiert, Phone, London." Telephone: Hop 2819.

". . . . But however this may be, in our neglect of scent we lose an exquisite and imaginative pleasure. For scent is the most imaginative of all the senses, in that it can create for us so much of what the other senses perceive. The Scent of Lavender, however faintly borne, means Lavender itself in its growth and colour and form; means even the garden in which it grows. It carries its own world with it, and Lavender Scented sheets are sweet with the sweetness of Nature itself. . . . . "—*The Times*, 1st September, 1923.

POTTER & MOORE'S
1749
MITCHAM LAVENDER WATER

A perfume of distinction which has stood the test of time

BATH SALTS

COMPRESSED BATH TABLETS

SACHETS

SMELLING SALTS

FROZEN LAVENDER WATER

TOILET SOAP

Potter & Moore's 1749 Mitcham Lavender Water has delighted the senses of many generations by reason of its alluring and refreshing fragrance. Its incomparable charm is the same to-day as it was in 1749.

Prices on Application

POTTER & MOORE, THE LAVENDER DISTILLERY MITCHAM :: SURREY

Sole Proprietors:

W. J. BUSH & CO. Ltd., Ash Grove, Hackney, London, E.8

Sole Scottish Agents for Articles of Perfumery:

MUNRO, McLAREN & SUTHERLAND - - GLASGOW

GAL

(GARDENS OF SPAIN)

The preparations of Perfumeria GAL, MADRID, including

GAL "JARDINES DE ESPANA" TOILET SOAP, PERFUME and COMPLEXION POWDER

which are being largely advertised in the leading papers, such as "The Sketch," "Tatler," "Eve," "Sphere," "The Lady," "Vogue," "Bystander," etc.

Can be obtained at lowest prices from the SOLE AGENTS:

HEPPELLS, 164 PICCADILLY, LONDON, W.1 and also from FRANCIS DRAKE & CO., 1 EDEN STREET, HAMPSTEAD ROAD, LONDON, N.W.1

OR YOUR USUAL WHOLESALER.

"PLAIMAR" SANDALWOOD OIL.

"BORONIA" PERFUME

is another of the "Plaimar" Successes.

SINCE THE BEGINNING OF THINGS the vast resources of Australia waited. A mighty continent, as big as the United States, waited for thousands of years for the Pioneer to give its wonders to the world and not the least of these is the "Plaimar" Sandalwood Oil.

The Success of "Plaimar" is its guarantee: every day, every week, every month the orders and repeat orders increase from all corners of the earth and buyers are booking all they can for 1925.

Sample and Prices f.o.r. or c.i.f. from Sole Agents

PLAISTOWE & CO., LTD.
KING'S CROSS, LONDON: & PARIS.

Telephone .. .. .. *North* 829 (3 *lines*).
Telegrams .. .. *Plaistowe, Kincross, London.*
Cables .. .. .. *Plaistowe, London.*

ENTHUSIASM on the part of the profession and public alike has laid firm foundations for DISPELLO CATARRH SNUFF, and this season's demand is abnormal. Observe the formula above and you will realise why it is an effective remedy—then look at the display and you will know at once why the public eye is attracted and the hand goes instinctively to the pocket.

This display is unique and so contrived that the unsightliness of a part-sold box is avoided. Three, six, nine or a full dozen daintily designed and cellophaned boxes can be displayed and yet kept clean—to see one is to buy one, and to use the snuff is to ask for it again. Keep a box in view of your customers and notice how quickly you turn snuff into money.

Per dozen - - - - - - - 4/6
Per gross - - - - - - - 48/-

A sample will be sent free on request.

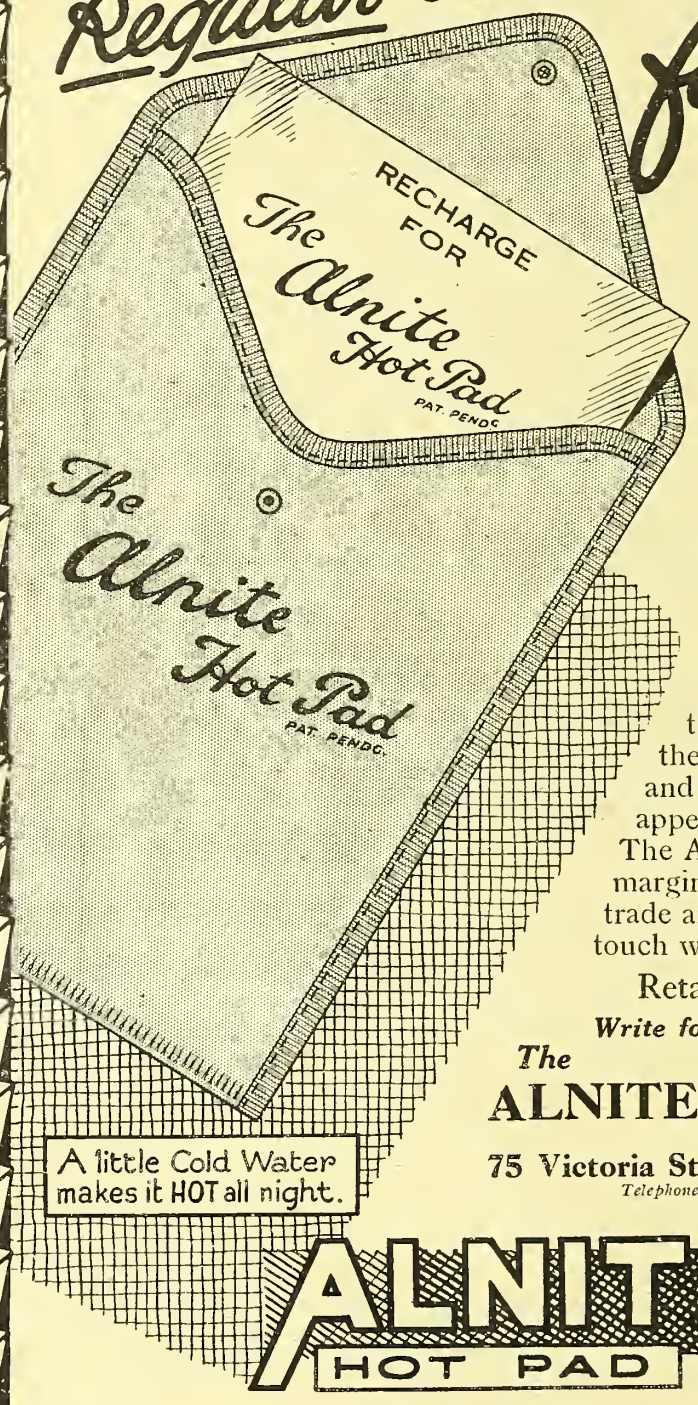
Special Packings for Export. *Prices on application.*

AYRTONS

"Everything Pharmaceutical"

LIVERPOOL

Recharge means Regular Customers for You



Each bag sold
MEANS
Constant orders for Recharges.

Introduce your customers to this new substitute for a hot-water bottle — the Alnite Hot Pad. The fact that it supplies warmth—instantly—with only the addition of a spoonful of *cold* water, will appeal to them. And the fact that they must come back again and again for recharges will appeal to you!

The Alnite carries a generous margin of profit, ensures steady trade and keeps you in constant touch with your customers.

Retails at **7/6**

Write for trade terms.

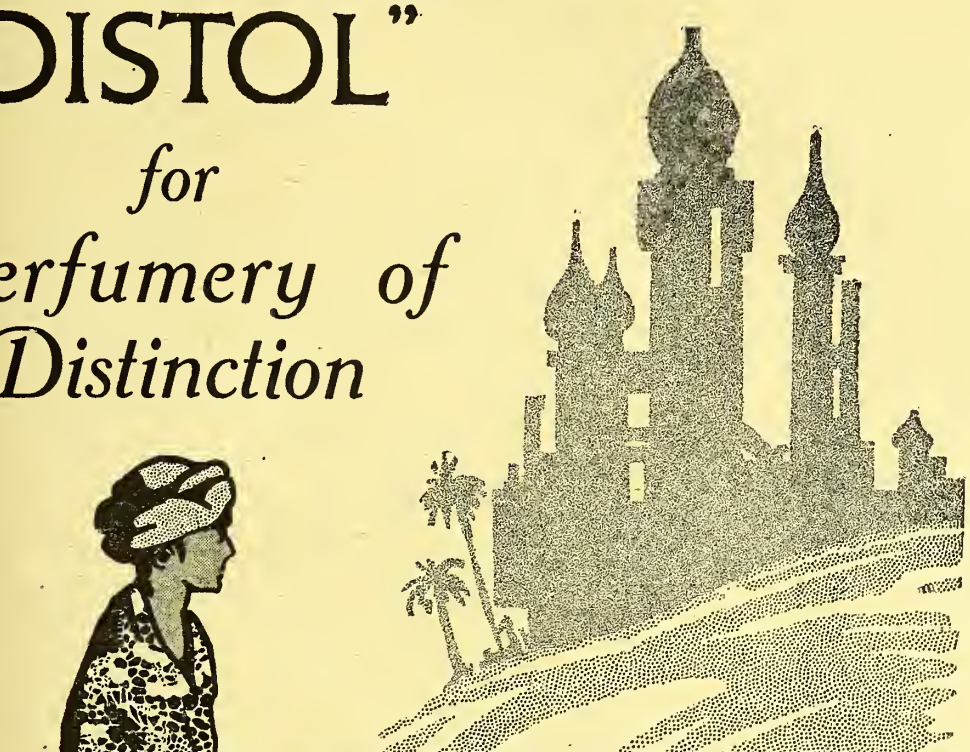
The
ALNITE COMPANY
LIMITED
75 Victoria St., LONDON, S.W.1
Telephone: VICTORIA 9518

ALNITE
HOT PAD

The Alnite Hot Pad has all the domestic utility of a hot water bottle and is ideal for motoring and railway journeys and for use in bath chairs and perambulators.

ORIENTAL "DISTOL"

for Perfumery of Distinction



The Vogue *of* Oriental Perfumes

The present demand for perfumery of the heavy, oriental type is met very completely by 'Distol' Ottos.

"Distol" Oriental, Nubian Poppy, Bouquet, Passion Flower, Tréfle, Orchid and Royal Orchid are all variations of this theme.

An ounce of any of them costs 7/6 and makes 80 ozs. of choice perfumery by the mere addition of S.V.R. and Aq. Dest. Write now for samples of six oriental perfumes made under commercial conditions from "Distol" Ottos.

¶ Other Oriental "Distols" are: "Bean Blossom," "Lotus Blossom," "Incense," "Indiana," "Rey del Hassin."

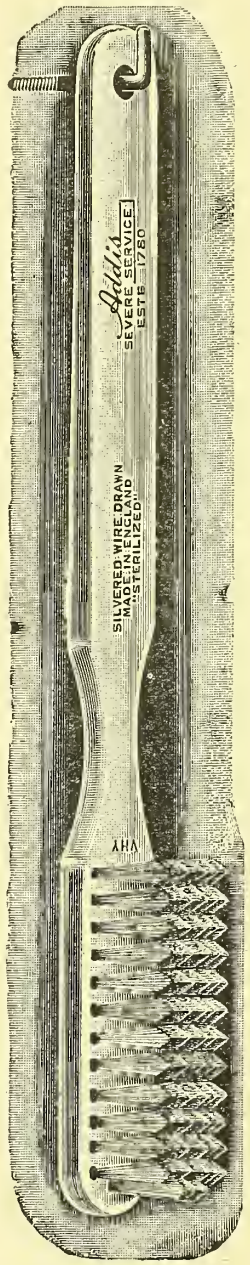
THOMAS KERFOOT & Co LTD
BARDSLEY VALE, LANCASHIRE,
& Bardsley House, London, N.1
ESTABLISHED 1797.

A/543

COPYRIGHT

The First Tooth Brush

ADDIS
SEVERE SERVICE
Estb. 1780.



Copyright Reserved.

was made in 1780 by WILLIAM ADDIS in London, England. The business then founded has been carried on continuously, passing direct from father to son. The policy of the business has always been "Service" to user.

When purchasing a Tooth Brush, should you require a stiff brush for Severe Service, ask for

"Addis Severe Service"

This is typically an English Style Gentleman's Brush, made of Unbleached Bristles, with small serrates on a plain straight handle.

For those who require a smaller and more stylish brush the

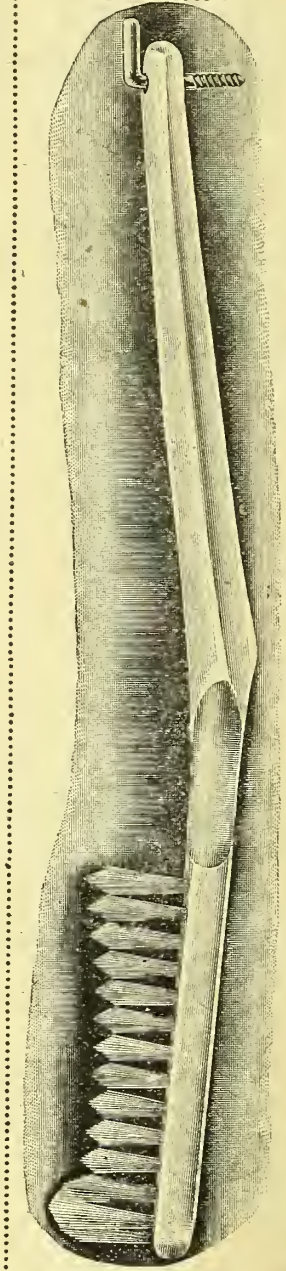
"Addis Prophylactic"

on a curved handle, will fill the want. This brush is made in Very Hard Unbleached Bristles, Hard White, Medium White, and Soft if required. We recommend the Hard for the average use, bristles always being softer when wet.

Both these brushes are hand-fashioned and hand-drawn, the best materials and methods of workmanship being used regardless of cost.

Manufactured in England and Guaranteed by:
THE OLDEST FIRM OF TOOTH BRUSH MANUFACTURERS IN THE WORLD

ADDIS
PROPHYLACTIC
Reg. No. 593367.



Copyright Reserved.

ROBT. ADDIS & SON

BRUSH WORKS, HERTFORD, ENGLAND.

'BOVAL' FLOOR GLOSS

FOR
PERFECT
DANCING

A Perfect Floor is essential

THIS IS PRODUCED BY

"BOVAL"
FLOOR GLOSS

NO WAX, NO WORRY.

SIMPLY SPRINKLED ON THE FLOOR, THE DANCERS DO THE REST.

It creates no dust and imparts a delightful fragrance to the room.

Packed in beautifully enamelled sprinkler top containers.

1/6 P.A.T.A. - 13/- dozen
2/6 ,, - 22/- ,,

Attractive Showcard supplied.

STOCKED BY LONDON HOUSES.

JAMES WOOLLEY SONS & CO. LTD.
MANCHESTER
Warehouse, Offices & Showrooms - Victoria Bridge.
Laboratories & Drug Mills,
Knowsley Street.

DEARBORN (1923) LTD.

37 Gray's Inn Road, London, W.C.1

Toilet Specialties.

	Price per doz. to Retailer	Selling Price P.A.T.A.
PILENTA SOAP ... ... A complexion soap.	10/-	1/-
PROLACTUM ... ... For the lips.	10/-	1/-
PARSIDIUM JELLY ... ... For wrinkles.	10/-	1/-
ALLACITE OF ORANGE BLOSSOM ... ... A dressing cream.	22/6	2/6
BORANIUM ... ... A hair tonic.	22/6	2/6
CLEMINITE ... ... For a face lotion.	22/6	2/6
COLLIANDUM ... ... For a face tint.	22/6	2/6
PERGOL ... ... A deodorant.	22/6	2/6
TEKKO PASTE ... ... Camphor cream.	22/6	2/6
STALLAX ... ... For a shampoo.	22/6	2/6
JETTALINE ... ... For clearing the skin.	31/6	3/6
PHEMINOL ... ... A depilatory.	36/-	4/-
MENNALINE ... ... For the eyelashes.	36/-	4/-
MERCOLIZED WAX ... ... A face cream.	18/- 31/6	2/- 3/6
STYMOL ... ... For oily complexions and blackheads.	36/-	4/-
SILMERINE ... ... Hair-curling fluid.	22/6	2/6
BARSYDE ... ... Dandruff eradicator.	22/6	2/6
TAMMALITE ... . For grey and faded hair.	22/6	2/6
LIQUID PERGOL ... ... To check excessive perspiration locally.	31/6	3/6
BICROLIUM ... ... For whitening the hands.	22/6	2/6
COCONOIDS ... ... For figure development.	31/6	3/6

The Products of

Messrs. PARKER, BELMONT & CO.

CLYNOL BERRIES ... ... For obesity.	36/- 58/6	4/- 6/6
SOFT PALERIUM ... ... For wrinkles.	45/-	5/-
LIQUID NAIL POLISH ... Brilliant and lasting.	10/-	1/-

Stocked by ALL Wholesale Houses.

COLONIAL DEPÔTS AND AGENCIES.

Australia: ALL WHOLESALERS,& DEARBORN (Australia), Ltd., Grace House, Clarence Street, Sydney.
South Africa: LENNON Ltd., Cape Town, etc.
SIVE BROS. & KARNOVSKY, Johannesburg.
India: FRAMJEE & SON, Bombay.
A. L. CHOUDRY, Calcutta.
New Zealand: SHARLAND & CO., Auckland and Wellington.
South America: DEARBORN (South America) Ltd., Calla Salta 264, Buenos Aires.
Straits Settlements & Federated Malay States: MEDICAL HALL, Ltd., Singapore.

HUDSON'S VEGETABLE LEAFLETS

Impart to the Complexion and Lips a Perfectly Natural Tint which cannot be detected.

On Attractive Cards of One Dozen.

P.A.T.A. PRICE

6d. each

or 1/4½ for 3 booklets

Sell-at-Sight !

TRADE PRICE

3/9 doz.

Of all the Leading Wholesale Houses, or

R.J.Reuter Co.Ltd.

69 CARTER LANE, LONDON, E.C.4

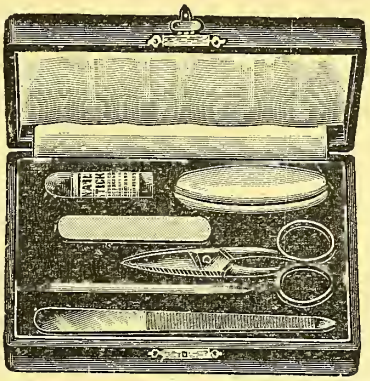
Telegrams: "Refreshing, Cent, London."

Telephone: Central 4461 4462

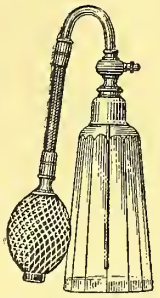
XMAS BUSINESS

WM. EDWARDS & SONS *have numerous and alluring "lines" seasonable for Christmas time*

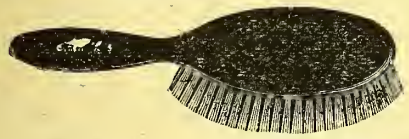
POWDER BOWL (China)
(English make.)
ROUND or OCTAGONAL
in many patterns and colours.
4½" 5½" 6½"
2/9 **3/9** **4/6** each



MANICURE SETS.—A splendid selection from **1/9** each to **30/-** each



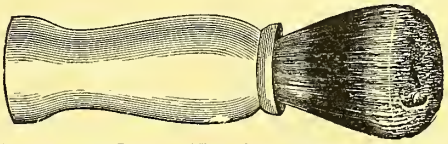
SPRAYS in Great Variety.
We carry full stocks, prices ranging from **1/6** each to **20/-** each



LADIES' & GENT.'S
Hair Brushes
of every description.

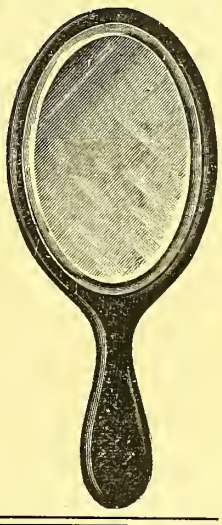
SHAVING SETS
Full range from **1/6** each to **21/-** each

HAND MIRRORS
(EBONY)
Round, Oval and Princess, from 8/6 each



Pure Badger Shaving Brushes and Pure White Bristle Shaving Brushes
ENGLISH MANUFACTURE

All prices and sizes in stock.

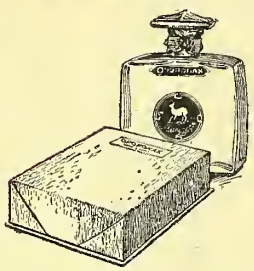


WILLIAM EDWARDS & SONS

Wholesale Druggists Sundriesmen

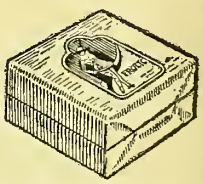
14-18 NILE STREET, CITY ROAD - - LONDON, N.1

4 PIESSE & LUBIN BIG SELLERS FOR XMAS



Also in this Series: Face Powders, Creams, Soaps, Bath Crystals, etc.

Make a determined bid for the Christmas Gift Trade by making a brave display of Piesse & Lubin Perfumes and Toilet Preparations in the windows and on the counters of your pharmacy. Here are four big sellers taken from the Piesse & Lubin range. Feature them prominently and they will help you capture the Gift Trade.



Also in the "Frolic" Series: Perfume, Face Cream, Complexion Powder, Soaps, Bath Crystals, etc.

PIESSE & LUBIN'S OPOPANAX.

Often imitated, but never equalled. The most-favoured Opopanax. Retail Prices **3/6, 6/-, 11/-** and **20/-**. Retail Price subject to 33⅓%.

"FROLIC" FACE POWDER.

Just the thing one girl will give to another at Xmas time. A ready seller. Price **1/6**, your profit 33⅓%.

PIESSE & LUBIN'S DAY CREAM.

In dainty jars of unique shape. A perfect line for Christmas presentation. Also Night Cream. Retails at **2/6** per jar. Price to trade 33⅓% less.

"FROLIC" BATH CRYSTALS.

A bumper line, selling at **2/6**. Shows you 33⅓% profit. An ideal Xmas gift. One of the "FROLIC" Series.

Piesse & Lubin's Day Cream.

"Frolic" Bath Crystals.

PIESSE & LUBIN Ltd.

Parfumeurs,

244 HIGH HOLBORN, LONDON, W.C.1

CHICAGO HAIR DYE

INVENTED 1893.

One Bottle Preparation.

Harmless to use.

IN FIVE SHADES:

Light Brown
Brown
Dark Brown
Black
Blonde

Retail **2/-**

Cost 11/- per doz.

Profit over 100% on cost.

Proprietors—

SINGLE, DALBY & CO.

42 Oldham Road, MANCHESTER

The new 6½d. Sample Size

"VELVEE-CLING"

APPLE BLOSSOM PERFUME

Beautifully Packed 4/6 dozen

A Grand Seller

Larger size Retail 3/-

Wholesale 24/-

SOLE WHOLESALE AGENTS:

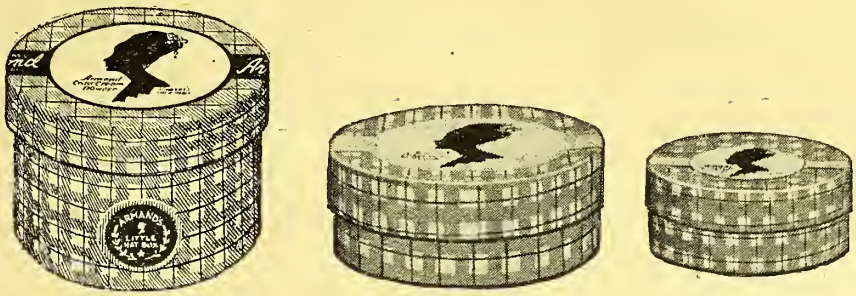
BENTON-SMITH LTD.

DALTON STREET and BULL STREET

(Entrance Dalton St., 2 doors from Bull Street.)

BIRMINGHAM.

ARMAND



4/- size. 2/- size. 1/- size.

COLD CREAM Complexion Powder

THE CHEMIST'S POWER

Your ability to influence sales is admitted.

Countless Manufacturers of Proprietary articles endeavour to enlist this power for their own ends.

Armand earns your co-operation and delivers your profit on every sale.

Florian & Armand Ltd.,
Queensway, Ponders End,
Middlesex

9/6 Profit
in every £1 you sell
of Armand Goods

Peldo

(Patent applied for)

THE INVISIBLE GLOVE

IF YOU SHOW 'PELDO' YOU WILL SELL IT!

'PELDO' IS ORIGINAL. **It is not a Substitution for Anything.**

Obtainable from all the Patent Houses @ **13/6** per dozen.

WINDOW DISPLAY MATERIAL FREE ON APPLICATION.

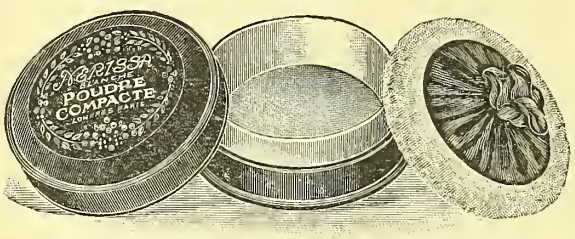
SOLE PROPRIETORS AND MANUFACTURERS:

C. R. HARKER, STAGG & MORGAN, LTD.

Devon Wharf and Bell Wharf,

EMMOTT STREET, MILE END, LONDON, E.1.

Poudre Compacte



The best range of Solid Powders on the market.

All complete with Puff, in assorted perfect tints. In attractive Show Boxes of 1 dozen.

F100.	"Thé Dansant," Nickel Plated Box ..	6/- doz.
F101.	"Thé Dansant," " " " with diminishing mirror	7/6 "
F102.	"Secret Charm," Embossed Aluminium Box, with diminishing mirror	5/- "
F103.	"Golden Dawn," Imitation Gold Box, with diminishing mirror	7/6 "
F104.	"Damask Rose," Imitation Gold Box, decorated in colours, with diminishing mirror	7/6 "
F1003.	"Nerissa," Attractive Card Boxes as illustrated, in handsome display outer ..	5/- "

Obtainable through all Wholesale Houses.

Perfect Powder. Freedom from breakage. Daintily presented. An assortment that will meet the taste of every buyer and bring repeat orders.

Sole Manufacturers: **SOLPORT BROTHERS, LTD, 184/190, Goswell Road, E.C.1.**

Tetralene Soap

REGD. SUPERSEDES

CLEANS PAINT WORK.

CLEANS CARPETS, UPHOLSTERY, CLOTHES, ETC.

REMOVES GRIME FROM HANDS.

THE PRODUCT WITH A MULTITUDE OF USES

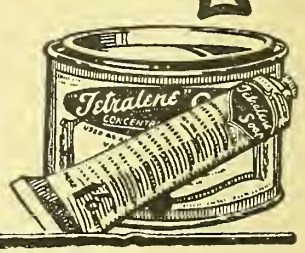
Rapidly and effectively cleans **Paintwork** of all descriptions. **Removes Grease, Grime,** and **Tar** from the **Hands, Clothes, Motor Cars, etc.**—in fact it will clean **Anything** and **Everything. 10 times stronger than any soap.** Sold in **1/-** Tubes and Lever-top Tins **1/6**

BIG PROFITS THE RESULT OF STOCKING TETRALENE

Apart from the exceptionally generous percentage of profits allowed the retailer with samples for distribution, a huge selling and advertising campaign will shortly be launched in the newspaper press and an enormous public demand created in your district. **Be prepared by laying in a stock now.**

Samples Trade Terms, etc., supplied on request.

STOCKPORT UNITED CHEMICAL CO., LTD., STOCKPORT, ENGLAND.



PERFUMERY & SACHETS

for the Christmas Trade

Floral Perfumes from 3/9 per dozen.

Devon Violet Perfume in wickered flagons.

Mitchola (Regd.) Olde English Lavender Water
in plain and wickered flagons, ½ oz. to 8 ozs.

Cased Perfumes suitable for high-class trade.

Sachets, Lavender Bags, Potte Pourri Bags,
etc.

LORIMER-MARSHALL, Ltd., 12 Tower Hill, London, E.C.3

EVERY

"Beaverpuf"
Trade Mark.

YOU SELL

INCREASES THE DEMAND FOR

***"Beaverpuf"* (Patent) POWDER REFILLS**

IN ALL TINTS.

RETAIL 6d. Each

***"Beaverpuf"* POWDER IN BOXES - RETAIL PRICE 2/6 Each.**

For SHOWCARDS, PARTICULARS of SPECIAL WINDOW DISPLAY DISCOUNTS, PRINTED MATTER, &c.

Ask your Wholesaler or write direct to

"Beaverpuf" Ltd.

PRIEST BRIDGE,
MORTLAKE,
LONDON, S.W.14

Telephone: PUTNEY 166. SOLE CONCESSIONNAIRES FOR GT. BRITAIN & IRELAND.

B B

This Coupon is a prominent feature in Half-page VIVAUDOU Advertisements appearing in the "DAILY MIRROR" and the "DAILY SKETCH."

Special OFFER

This Coupon is available until -

Take this Coupon to your Chemist and he will supply you with the following VIVAUDOU PREPARATIONS to enable you to start the Vivaudou Way to Beauty immediately :

(a) An original 2/- size VIVAUDOU (Carte Jaune) Lemon Cream } FOR 2/6
(b) A special size VIVAUDOU (Carte Bleue) Beauty Cream }

This Coupon must be given to the Chemist to obtain the TWO Creams at the special price.

If you have any difficulty in obtaining these they can be had direct and post paid from the Sole Distributors of Vivaudou Preparations for the United Kingdom and Ireland :

PENNEY & CO. LTD., Cavendish House, 20 Old Cavendish St., London, W.1.

A scheme that will bring you many new Customers for

VIVAUDOU

PRONOUNCED "VEEV-O-DOO"

Toilet Preparations

Your Profit is $33\frac{1}{3}\%$

Write to the Sole Distributors of Vivaudou Toilet Preparations for Trade Terms :

PENNEY & CO. LTD
20 Old Cavendish Street
London, W.1.

Telephone } MAYFAIR 6651.
Telegrams }

In addition to the coupons appearing in Vivaudou advertisements, thousands are being distributed every week to applicants for Vivaudou samples. When a customer presents you with one of these coupons, *remember that we have sent her to you* to purchase Vivaudou Lemon Cream and Vivaudou Beauty Cream. Don't let her walk out of your pharmacy disappointed and go elsewhere to be served. *Order your stocks now.*

A postcard to us will bring you full details of this scheme and also our trade terms.

A Beauty Aid for Women which does not compete with any existing line you stock.

Artifex

soft all-rubber Curlers are particularly suitable for

BOBBED HAIR

because they curl the extreme ends of the hair.

Attractive show cards, counter display boxes and other sales matter with every order.

Artifex Curlers are being stocked by a rapidly increasing number of chemists. For your share of the business get particulars of this quick-selling, well-advertised line from your wholesaler, or, if you prefer, write in first instance to

"ARTIFEX" DEPARTMENT,

The MERKHAM TRADING Co. Ltd

Bush House ∴ Aldwych ∴ W.C.2

"Newberys"

FRANCIS NEWBERY & SONS Ltd

THE HOUSE FOR

Druggists' Sundries
Toilet Requisites
Packed Pharmaceuticals
Proprietary Articles

A recent testimonial from a customer :

"I am writing to mark my appreciation of the House's **attention and despatch.**
"I have been helped very largely by your House.
"I must also **congratulate you** (and incidentally myself for having taken them up) **on your Packed Goods.**"

FRANCIS NEWBERY & SONS, Ltd.
27 Charterhouse Square, London, E.C.1.

13 Crichton Place, Cardiff. **12 School Lane, Liverpool.**

£50 For handing out a Booklet

"A DAY IN THE HOME OF EASE" is a booklet about the size of "Punch." It has been specially written by Mr. Pett Ridge, and contains 26 pages in full colour illustrating various first-class articles for use in the home. These illustrations have been designed by well-known artists, and include a charming design for Glymiel Jelly by Miss Hilda Cowham. The booklet is issued free for distribution to your customers, but to prevent waste we are only sending out parcels of 100 to really interested Chemists who order a parcel of Glymiel Jelly to the value of 18/- (*see below*).

Should a customer of yours to whom you have given a booklet buy a tube of Glymiel Jelly from you and with it win the competition included in the booklet, you will receive the above cash prize of £50. The booklet alone will sell the Glymiel Jelly.

PLEASE MARK YOUR ORDER "BOOKLETS"

PARCEL "B."
2 dozen 6d. Glymiel Jelly,
1 dozen 1/- Glymiel Jelly,
3 dozen free samples,
500 8oz. demy wrappers, **18**/- all.

PARCEL "C."
2 dozen 1/- Glymiel Jelly,
3 dozen free samples,
500 8oz. demy wrappers, **18**/- all.

OSBORNE, BAUER & CHEESEMAN, Wholesale Depot, 258 EUSTON ROAD, LONDON, N.W.1

REAL EBONY TOILET ARTICLES

A COMPLETE RANGE **AT KEENEST PRICES**

ILLUSTRATED CATALOGUE ON APPLICATION

ADOLPH SCOTT Ltd. **BIRMINGHAM**

Phone: NORTHERN 2102

Grams: "ADOLPH, B'HAM"

"Toilets Calling"—for your Season Gift Trade

The most popular presents to-day are **Toilet Articles,** Ebony and Shell and Ivory Xylo Toilet Sets and Toilet Requirements, Cases of Brushes, Dressing Cases, Mirrors, Perfumes, Badger Shavers, Hair Brushes, Safety Razor Sets, Hair Ornaments, etc.

HAVE YOU A FAIR SHARE OF THIS DEMAND?

An exclusively **Toilet Goods House,** we claim to offer the largest variety, and best value in these saleable lines.

LET US HELP INCREASE YOUR TURNOVER!!!

SEND AT ONCE FOR OUR SPECIAL SEASONAL GIFT LIST

W. E. BINGHAM & CO. The Toilet Goods House, **Shudehill, MANCHESTER**

Telegrams: "Arnecta, Manchester." *ESTABLISHED* 1904. *Telephone: 1073 City.*

The Evan Williams

ALWAYS IN GREAT DEMAND.
PRICE LIST ON APPLICATION.
The EVAN-WILLIAMS Co., Ltd., 14/15 Union St., W.1.

HENNA SHAMPOO.

EXCEPTIONAL OFFER!

GILLETTE BLADES

Canadian (12's) 26/6 per box.
U.S.A. (5's and 10's) 28/6 per box.
Special Quotations for larger quantities. Send for Illustrated Catalogue.

M. L. LISSMAN & CO. 179 QUEEN VICTORIA ST. — LONDON, E.C.4 —

PAPIER POUDRÉ
POPPŒA ROUGE

Made in Booklet Form in White, Rose and Rachel tints. 4d., 6d., 8d., and 1/4 sizes at 2/8, 3/9, 5/- and 10/- per dozen nett, respectively.

ONE SIZE ONLY 1/-, at 8/- per dozen.

Sole Proprietors and Manufacturers:

PAPIER POUDRÉ, Ltd., 46 Baker Street, W.1

NONE GENUINE WITHOUT ABOVE TRADE MARKS.

BIDWELL, BIDWELL & CO. LTD.

ESTAB. 1839.

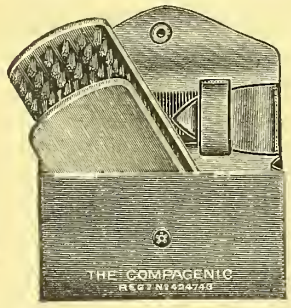
Castle Works, Axminster, Devon.

"COMPAGENIC"

Regd. No. 424,746.

Two hair brushes and comb in leather case. The pair of brushes take up only the space of one ordinary brush. Outfit measures $5 \times 2\frac{3}{4} \times 1\frac{3}{4}$ inches. Can be cleaned without washing by running bristles of one brush up and down the other. Suitable for officers of Army and Navy, Tourists, etc.

	Cost	Retail
IN GREY BRISTLE	6/6	10/6
IN WHITE BRISTLE	8/-	12/6
EBONY BACKS AND WHITE BRISTLE	13/-	20/-



Copy of Testimonial.

BAHR-EL-GHAZAL,
SOUTHERN SOUDAN.
17/9/24.

DEAR SIRS,

"I am seizing the opportunity of the fortnightly mail leaving to let you know how extremely pleased I am with the pair of small hair brushes, your 'Compagenic' which I bought last year.

"They have been with me here now for 12 months, leading a hard life in this trying country, and up to date there doesn't seem to be a bristle missing, and they are as stiff as ever. For a wild country like this they are just the thing."——, CAPT.

Your public is pleased, your profit assured if you concentrate on the

"VALET" Auto Strop Safety Razor

AUTOSTROP SAFETY RAZOR CO., Ltd.
197, City Road, LONDON, E.C.1.

Estd. Trade Mark 1850

BERTONS of Old St.

When you are next placing your contract for Surgical Dressings, etc., it will be well worth your while to let us quote you.

A "Berton" contract secures to you the following advantages:—

Firstly: Contracts run from any date, and are renewed automatically:
Secondly: Labels bearing your own name, etc., are supplied without extra charge, and our system in this connection is such that no delay in delivery occurs:
Thirdly: Uniformity in supplies is secured:
Fourthly: Contract holders may take deliveries in any quantities:
Fifthly: All ordinary orders are despatched within 2/3 hours of receipt:
Sixthly: Packing is free:
Seventhly: No carriage is chargeable on orders of £1 or over in value:
Lastly: Contract holders secure the keenest possible prices always.

We repeat— It is worth while!

For your present needs may we send you our current Price List? A postcard will bring it.

ARTHUR BERTON, LTD.

Showrooms, Factory and Offices:

Britannia House 238/248 Old Street, London, E.C.2

Telegrams: Clerkenwell 1347/8/9. "Aybelim, Finsquare, London."

MANCHESTER: 36 Chapel St. Victoria Bridge. **GLASGOW: 49 Jamaica St.**

The "GRIP-TIGHT"

PNEUMATIC SOOTHER

IN THE CLEAN CARTON

PURE AIR only is contained in the Teat. The Air is trapped and cannot escape. A firm but resilient Biting Piece is the result, and this is most effective in Soothing the gums of Teething Children.

The Counter Display Container illustrated holds 3 or 6 dozen Cartons, and is a great improvement on the old-fashioned style of carding.

SOME OF THE ADVANTAGES ARE:

1. Cleanliness.
2. Protection from deterioration due to exposure,
3. Attractive Counter Display.
4. Convenience in handling, storing, packing, &c.

"GRIP-TIGHT" SOOTHERS are made in a large variety of patterns, and can be retailed at prices from **2d.** to **9d.**

Obtain through your Wholesale Sundries House.

TO INCREASE YOUR REVENUE SELL

"TOINOCO"
The Original Brand.

PAPER HANDKFS.

THEY MEAN INCREASED SALES. The only Paper Handkerchief regularly advertised. Face Price. Minimum Retail.

They are not a Substitute for anything else you sell. There is no Substitute for them.

"Silky Fibre," 50 for 2s. *"Papier Crepon" 50 for 1s. 9d.*

Toinoco Handkerchief Co., Ltd., 55 Hatton Garden, London, E.C.1

A line the Stockist may strongly recommend, knowing that he is meeting the case with articles of unvarying reliability :—

"SURCO" SEAMLESS SURGICAL HOSIERY

comprising ELASTIC STOCKINGS, BELTS, SUSPENDERS, TRUSSES, etc.

Write for Price Lists and Measurement Forms to the Patentees and Manufacturers :

THE SURGICAL HOSIERY CO. LTD., Dept. B, Russell Street, NOTTINGHAM.

1

SURGICAL DRESSINGS

ABSORBENT, PLAIN and UNBLEACHED COTTON WOOLS, BANDAGES, GAUZE

Wholesale and Export only.

GEORGE HAYNES & CO. - - STOCKPORT, Eng.

Telephone : 2112 Stockport. Telegrams : "Haynes." Code : A B C, 5th Edition.

ALUMINIUM OINTMENT BOXES

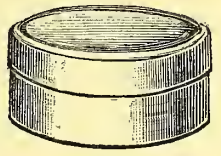
BRITISH MADE.

Fill the gap between the chip box and the porcelain pot. Try an assorted dozen. You will find them just what you want.

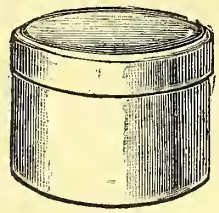
REDUCTION IN PRICES

***PRICES** (either shape, tall or flat):*

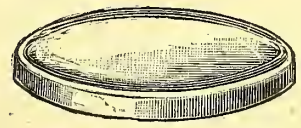
Per gross : ¼ oz. **9/-**
„ ½ oz. **12/-**
„ 1 oz. **16/6**
„ 2 oz. **27/-**

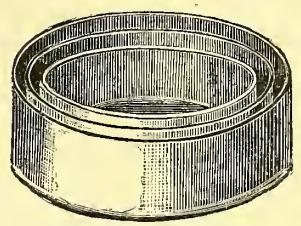


½ oz.



1 oz. TALL.





FLAT SHAPE NESTED.
¼ oz. ½ oz. 1 oz. 2 oz.

(The 2 oz. tall shape is similar to the 1 oz. size but twice the height.)

Chemists everywhere are taking up the use of these for their preparations. Their light weight as compared with porcelain pots makes for much saving in regard to carriage, the nested ones being specially suited for export.
For large contracts special rates will be quoted.

CARRIAGE PAID ON ORDERS OF £3 AND UPWARDS.

A discount of 5% for prompt cash is allowed on all amounts of 10/- and upwards. Money returned if goods are not satisfactory. Write for New Price Lists of Druggists' Sundries, Toilet Requisites, Rubber Goods, Cut Sheet Rubber Appliances, etc.

BURGE, WARREN & RIDGLEY, LTD. 91 & 92 GREAT SAFFRON HILL, LONDON, E.C.1.

The only Vacuum Flask with a GLASS DRINKING CUP

This is an innovation which is going to appeal to thousands of customers on account of its cleanliness and durability and the way in which it ensures the contents against any metallic taste. The "Elfin" Flask is practically all glass, "diamond-hard" and untarnishable. The patent glass cup removes all danger of burning the fingers or blistering the lips. The

ELFIN VACUUM FLASK

The All-Glass Drinking Cup

RETAILS AT **4/6**

Write for generous Trade terms. Supplied in cases of 100 and in sample cases of 12 and 24.

Central Depot "C,"
THE ELFIN FLASKS
11 OAT LANE, NOBLE ST., LONDON, E.C.2

YOUR REPUTATION

An unsatisfactory Clinical Thermometer may mean the loss of a valuable customer.

Therefore stock—

Zeal's
CLINICAL THERMOMETERS

GUARANTEED RELIABLE AND PERMANENTLY ACCURATE

A certificate of accuracy is supplied with each instrument.

Write for particulars to the Manufacturers :—
G. H. ZEAL Ltd. 75 & 77 ST. JOHN ST., LONDON, E.C.1.

2

H. GORDON (London) Ltd.

8 CITY ROAD - - E.C.1

Wholesale & Export only

DRUGGIST SUNDRIES

OF EVERY DESCRIPTION

SURGICAL RUBBER GOODS

"GORDONIA," "MIDINETTE," "DAUNTLESS" and "SEAL" BRANDS

ALWAYS IN STOCK.

Price Lists sent immediately on application.

Best Quality Guaranteed.

Every Chemist should stock our well-known "Gordonia" Lines

FEEDING BOTTLE OUTFIT

Containing Bottle, Teat, Valve and Brush. Attractively Boxed @ **7/6** per doz.

"GORDONIA" ALLRUBBER SOOTHER

Each in Box, and packed 2 doz. in Outer Container for Counter Display @ **51/-** per gross.

"GORDONIA" BRANDED ENEMAS

in Sterilisable Red and Black Enamelled Finish @ **16/9** per doz.

The Cheapest and Best on the Market.

H. GORDON (London) LTD.

8 CITY ROAD - - E.C.1

Invaluable in Maternity

The prospective mother cannot take risks. The life and the future happiness of herself and her child depend on the care in those trying months. Tens of thousands are wearing the Norvic Crêpe Binders, knowing that they give just the right support and elasticity. Universally recommended by doctors and nurses, they preserve the figure before and restore it after childbirth, giving the right support in all cases where durability and comfort are needed. In 6, 8 and 11-in. widths.

NORVIC Regd.

CRÊPE BINDERS

Sole manufacturers:

GROUT & CO. LTD. Great Yarmouth

Stocked by all leading wholesalers.

DR. SCHOLL'S TOE-FLEX

Corrects bunions, straightens crooked toes by mechanical action. Made of finest soft surgical rubber it gently restores the joint to its normal position. Three sizes, price **2s.** each.

Dr Scholl's Foot Comfort Appliances

give immediate relief and permanent correction to every type of foot trouble. By linking up, through strong window displays, with "Scholl" National Advertising you will obtain your share of the tremendous demand we create, thereby greatly increasing your profits.

Write to-day for full particulars.

The SCHOLL MFG. CO., Ltd., 1-4 Giltspur St., London. E.C.1

HOOPER & CO.

HOT WATER BOTTLES.
CHEMISTS' SUNDRIES.
SURGICAL RUBBER GOODS.
HIRE DEPARTMENT.

26 Charlotte St., London, W.1.

TELEphone Museum 2151 (4 lines).
grams "Superabound, Wesdo, London."

KEENE'S . . . GUARANTEED . . . REMEDIES

"Makes your feet glad!"

Corns?

THE simplest and quickest method of removing corns, root and all, without pain, is to use - - - - -

KEENE'S
'ONE-NIGHT' CORN CURE
1/3 per box

For all Stomach Troubles

KEENE'S Charco-Pepsic digestive tablets are invaluable for the relief of all stomach troubles. Guaranteed to positively cure Dyspepsia, Biliousness, Stomach Headache, Constipation, Belching, Heartburn, Bad Breath, Sour Stomach, Flatulence, Acidity, etc. **1/3, 3/-, 5/-** (6 times the 1/3 size).

KEENE'S
CHARCO-PEPSIC
DIGESTIVE TABLETS

"Enjoy your meals!"

¶ Write to us at once if you have not already got your Window Bills advertising our Prize Competition for Children. It is quite a simple competition, and is bound to increase your sales.

All of Keene's Remedies are supplied on the understanding that we refund the purchase price if your customers are not satisfied. Be sure and keep a stock of Keene's Remedies. Full details and trade discounts will be sent on request.

The Keene Laboratories
52 Gray's Inn Road, London, W.C.

The only Baby Food whose claim is backed by rigid scientific proof

Humanised Trufood is made at the Creameries, Wrenbury, from the purest milk that comes from the rich pastures of the famous Cheshire dairy country. It contains soluble lactalbumen in the same colloidal condition and in the same quantity as in breast milk. It is standardised as regards its fat content, and the casein present corresponds to human milk and not to cows' milk. In short it is analogous in composition to breast milk, as the following analysis clearly shows :—

	Breast Milk	*Cows' Milk*	*Humanised Trufood*
Lactose	6·5	4·7	6·25
Fat	3·3	3·5	3·45
Casein	0·9	3·0	0·80
Lactalbumen	0·4	0·3	0·60
Salts	0·2	0·8	0·65
Water	88·7	87·7	88·25
	100·0	100·0	100·00

This result has been achieved by removing a part of the casein of full-cream Cheshire milk, so that, after the addition of suitable quantities of pure fresh cream and lactose, a milk powder of the above composition results.

No other Infants' Food on the market is justified in claiming this close analogy to human milk.

You are certain to be asked for Trufood, and should order at least a minimum supply to meet enquiries.

You are invited to apply for reproduction of actual photograph (in colours) of a recent incubation test of various milks. This is obtainable by post.

TRUFOOD

TRUFOOD LIMITED

The Creameries, Wrenbury, nr. Nantwich, Cheshire

T.F. 119-130

IF YOU WANT GOOD VALUE IN

FOREIGN AND BRITISH WINES

"Crown" Brand Liebig's Meat and Malt Wine, "Win-Ferro" — Tonic Blood Wine, Lime Juice Cordial and Lemon Squash

Write to :—

LAMB & WATT, Ltd.

48 ST. ANNE STREET, LIVERPOOL

for Price List.

ESTABLISHED 1847.

Highest Awards at all International Exhibitions where shown.

"GOOD! IT'S MASON'S!"

MASON'S WINE ESSENCES

Please send for Price List and Window Display Terms

NEWBALL & MASON

NOTTINGHAM.

a suggestion

THE clean milk campaign launched a short time ago, and still going strong, is without question all to the public good. And equally without question it has not benefited those pharmacists who did not realise the opportunity presented them.

Fresh cows' milk, although now almost universally delivered in bottles, can never be absolutely free of germs often harmful to infants. It is up to all chemists to help themselves by this movement; we give you the opportunity in Milkal, the clean milk. For the reasons given on this page Milkal has long held first place in Hospitals and Infant Welfare Centres.

A reputation for selling only reliable goods is the foundation of your business; recommend Milkal and you establish a regular selling line.

MILKAL
THE CLEAN MILK

Milkal is fullcream milk dried by spraying it through a current of air heated to a certain temperature, and cleansed of pathogenic organisms without being sterilised. Sterilisation, as you know, destroys some of the vital qualities of milk. The ratio of its constituents is that of the solids of rich milk; your customers supply the water which we took out.

The chief advantages of Milkal are :—
100% soluble in water.
The fat in the milk thus obtained does not rise to the surface as an oily mass.
Hardly any coagulation of the Albumen.
The Calcium-Casein balance is undisturbed.

Analysis :

Moisture	1·50%	*Lactalbumin* ..	3·04%
Fat	29·00%	*Lactose*	37·64%
Casein	23·01%	*Ash*	5·81%

WRITE FOR TRADE TERMS TO THE SOLE DISTRIBUTORS:

MILKAL LTD

31 St. Petersburgh Place, Bayswater, London, W.2

Produced and Packed in Devon (England), by MILKAL, LTD., London and Devonshire.

Each line represents forty chemists!

. . . . . but even that is not the total number of chemists in the clientèle of John W. Royle, Ltd. Such is the success that only hard work and long experience can achieve! Every day this firm is supplying chemists all over the British Isles with any natural mineral water at the shortest notice.

Write for Price List showing Wholesale and Retail Prices to—

JOHN W. ROYLE, Ltd.

Phœnix Ho., 19 Oxford Street, W.1

PHONE - - MUSEUM 1474

DIRECT IMPORTERS OF ALL NATURAL MINERAL WATERS

PURE ORANGE WINE

A. MILLAR & CO., LTD., DUBLIN

(VINUM AURANTII B.P.) Prepared in strict accordance with the Formula of the British Pharmacopœia. (Wholesale only.)
Samples from Head Office, Thomas Street, DUBLIN, or London Office, 74 Great Tower Street, LONDON, E.C.3.

THE CHEMIST'S COMPACT LIBRARY—Money-making and Money-saving Books

EVERY BOOK by an EXPERT

May be obtained at the published prices from any Wholesale Drug or Sundries House, or from

"THE CHEMIST AND DRUGGIST," 42 Cannon Street, LONDON, E.C. 4

Branch Offices: MANCHESTER & SHEFFIELD, ENGLAND; MELBOURNE & SYDNEY, AUSTRALIA.

Important Note to Chemists without Licenses

It has been established by law that Registered Chemists may sell Wincarnis with Quinine *without* a License.

WINCARNIS

Sells readily ALL the time.

COLEMAN & CO., Ltd., Wincarnis Works, Norwich

Prices to the Public:

Large Size **5/-**

Small Size **3/-**

This Display Material given with orders for 6 dozen and over

These will help you to

GET THE BUSINESS

and

"OPTIMUS"

Cod Liver Oil Emulsion

WITH HYPOPHOSPHITES 33⅓%

will

BRING THE PROFITS

ONLY THE FINEST NON-FREEZING OIL IS USED
THE PREPARATION IS NON-SEPARABLE
ELEGANT IN APPEARANCE AND VERY PALATABLE
ATTRACTIVELY PACKED IN WHITE FLINT BOTTLES

COST	4 oz.	**7/6**	8 oz.	**11/6**	16 oz. **17/6**
SELLS (P.A.T.A.)	,,	**1/-**	,,	**1/6**	,, **2/3**

For 12 doz. assorted 3d. per doz. less.

CUXSON, GERRARD & CO. LTD.
OLDBURY, near BIRMINGHAM.

NURSE HARVEY'S MIXTURE

A safe, simple, and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessaries from him. Moreover, the continuous demand for it produces a quick turnover.

For Direct Terms apply to—

OSCAR SCRUTON & CO., YORK

Dr. DE JONGH'S

LIGHT BROWN

COD LIVER OIL

IN IMPERIAL HALF-PINTS, **4/-**

ANSAR, HARFORD & CO., LTD.
182 Gray's Inn Road - - LONDON
SOLE CONSIGNEES.

ATKINSON & BARKER'S

INFANTS' PRESERVATIVE

THE BEST AND SAFEST INFANTS' MEDICINE OF OVER 120 YEARS' STANDING.

Prices and Terms on application to R. BARKER & SON, Ltd.
13 Wesley St., C.-on-M., MANCHESTER.

DOES NOT CONTAIN any SCHEDULED POISON.

Guaranteed non-separating & non-crystallising

The British DiaMalt Company

(Proprietors: H. A. & D. TAYLOR, LTD.)

9, Holborn Viaduct, London, E.C.1

Telephone: City 1765. Telegrams: "Nutrimalt-Cent-London."

Laboratory & Works: SAWBRIDGEWORTH, HERTS.

MALT EXTRACT SPECIALITIES

Samples and Prices on request.

ACTUAL MAKERS OF THOROUGHLY RELIABLE PRODUCTS.

For Quality in

MALT EXT.

AND

MALT & OIL

WRITE TO

C. Tolkien & Co.

FACTORY & MALTINGS: APOLLO WORKS
OFFICES & WAREHOUSE: COMMERCIAL MILLS

BLACKBURN

Belfast - - 31, Antrim Road

Imperial Bee, Esq., Salesman

YOUR customers have been introduced to him through the medium of the daily press and weekly papers which appeal to seven million readers.

Every visitor to the New Zealand Pavilion at Wembley, knows him well and nearly 50,000 have bought samples of

"Imperial Bee"

NEW ZEALAND HONEY

IT HAS THE LARGEST SALE IN THE WORLD.

If you have not stocked, send your orders at once and take advantage of the demand.

CASES per doz. carriage paid.

48/1's Glass Screw-top Jars @ 14/- 48/1's Monopots @ 12/6
48/½'s " " @ 8/6 48/½'s " @ 7/3

A. J. Mills & Co. Ltd., 14 Tooley St., S.E.1

BOTTLES & GLASSWARE

OF EVERY DESCRIPTION FOR THE TRADE

WHOLESALE ONLY

In all Colours

We make good

BOTTLES

—hand or machine made.

Large and well-organised works enable us to meet your immediate requirements for

DISPENSING, EMULSION, COUGH MIXTURE, SAUCE, EMBROCATION, FEEDING BOTTLES, &c.

Our prices are right —and our Bottles are British manufacture.

Make us your standard Bottle suppliers —we can meet your every need.

LAX & SHAW LIMITED.

Albert Glass Works, Hunslet, Leeds.

BELINDA GLASS WORKS, HUNSLET.
CLARENCE GLASS WORKS, HUNSLET.

TEL. ADD: FEEDERS, LEEDS." TEL. NOS: 27047 23080 LEEDS

When you're sending out enquiries— remember to 'Ask GOODALL'S first'

EVERY week more and more chemists are finding out that we are able to suit their needs exactly, in pack and quality and price, so each week sees our volume of business getting larger.

Of very many of the things you buy we are actual manufacturers and packers—you pay one profit only and you get everything fresh and new.

Won't you send a card, please, for anything you happen to be buying?

Here are a few Winter suggestions:

Malt and Oil
(AND MALT EXTRACT)
First quality, with wide range of fine labels, including the popular and high-class black-and-white "Script." Own name.
Let us send you prices and specimen labels. Kindly mention approximate season's needs. Low prices are winning us scores of new contracts.

Chemical Food
Our own manufacture, of course, and specially palatable. Handsomely labelled, with, or without cartons.
Our quotations are really competitive, and everything is offered "Own Name" — own name perfectly printed and not roughly "filled in."

The New Velva Series of Everyday Lines
(All Black-and-White "Script" Labels)
Cod Liver Oil, Chemical Food, Castor Oil, Liq. Paraffin, Syrup of Hypophosphites, Glycerine of Thymol, etc.

Cod Liver Oil and C.L.O. Emulsion
In a splendid range of packs and labels—all very saleable,

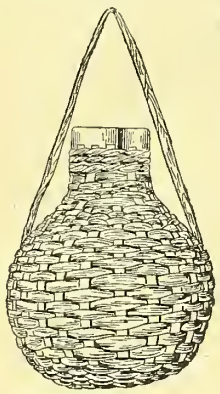
Petroleum Emulsion

WATERGLASS.
Soon the season will be upon us again and we wish to remind you that we are one of the very largest suppliers in the country. We have excellent packs reserved for pharmacists (printed TINS or own name) and supply any quantity at the keenest possible prices. If you send us a card now we will register your name to receive our best price when ready.
These are just a few suggestions—we invite your enquiries for all similar requirements. Full Lists free on request.

GOODALL, BACKHOUSE AND CO. LEEDS

PERFUME BOTTLES

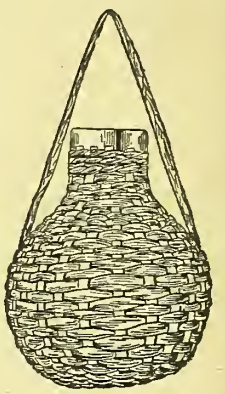
When ordering your next supply, give us an opportunity to quote you. We have several very attractive lines similar to those illustrated, or we can make to your own specification.



WICKERED EAU DE COLOGNE

In ½ oz. and 1 oz. sizes, in plain or coloured wickering.

PERFUME BOTTLES (Nos. 60415/7).



WICKERED EAU DE COLOGNE

In ½ oz. and 1 oz. sizes, in plain or coloured wickering.

SEND TO-DAY FOR OUR ILLUSTRATED LIST

JULES LANG & SON

Telephone : Clerkenwell 8770-2
Codes : A B C, 5th Edition.
Scott's 10th Edition (1906).

The Glass Specialists
CHARLTON PLACE,
ISLINGTON, LONDON, N.1.

Telegrams : "Assorted, 'Phone, London."
Bentley's Complete Phrase Code.

G. B. KENT & SONS, LTD.

Are known the World over as the Largest Manufacturers of

BEST BRITISH BRUSHES

Please write for full Particulars to—

75 Farringdon Road, E.C.1.

Here are your Corks

PYRAMID TRADE MARK

Good Sound Corks, full size, suitable for N.H.I. and general dispensing.

Parcel No. CL15
15 gross 8 oz. for 10/6

Parcel No. CL30
30 gross ,, 20/-

Sent Carriage Paid on approval.

The Cork Firm, Limehouse, London, E.14.

N. W. Mitchell & Sons, Ltd.

MAWSON'S
OPTIMUS FILTERS

The most efficient household filter. Made in different sizes in earthenware, glass and tourist patterns. Stocked by leading wholesalers.

Write for terms to the manufacturers.

MAWSON FILTER COMPANY
(MAWSON & PROCTOR, LTD.)
NEWCASTLE-ON-TYNE.

"TANK" STROPPER FOR GILLETTE BLADES

WE HAVE BEEN APPOINTED **SOLE CONCESSIONAIRES** FOR **BRITISH ISLES & FREE STATE.**

VERY SPECIAL FACTORS' TERMS

WARDS OF WARRINGTON

The Advantages of a Good Shop System

would help many Chemists to get much more profit out of their businesses than they are now getting.

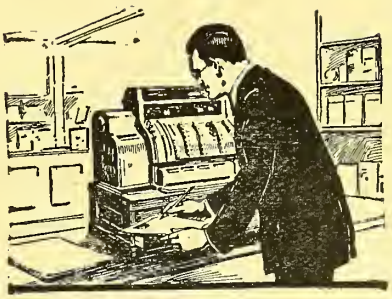
A Latest Model

NATIONAL CASH REGISTER

provides these important benefits :—

Protection

PROTECTION. Accurate records are provided of all transactions. These prevent mistakes, leaks and misunderstandings and protect the interests of Shopkeeper, Assistant and Customer.



Information

INFORMATION. The register shows exact business done; total Cash Sales, Credit Sales, amount of Outstanding A/c's, takings of each assistant, etc. These figures save much detail work and enable a business to be conducted in the most profitable manner.

Quick Service

QUICK SERVICE. Customers can be waited on more quickly and accurately. The business-like service pleases them and they tell their friends of the shop providing it. This increases trade and profit.

ECONOMY. The system saves money by stopping all loss and reducing overheads. It prevents failure to charge goods sold on credit, and prevents disputes that lose trade. Economy is the greatest recommendation of a National Cash Register.

With the help of a "National" you will have a highly profitable Christmas Season and better results all the year round.

Send a Postcard or this Coupon for further details. ☞

The National Cash Register Co., Ltd.,
225 Tottenham Court Road, London, W.1.

The N.C.R. Co., Ltd., 225 Tottenham Ct. Rd., London, W.1.

Please send without obligation further details of new National Cash Registers.

Name .....

Address.....

C. & D. .....

TO ADVERTISERS

OR THOSE CONTEMPLATING ADVERTISING.

For Expert Advice on all publicity matters consult us.
We supply striking original Copy, First-class Ideas and designs, and possess an exhaustive and unrivalled knowledge of media—for all advertising Campaigns (General Publicity and Mail Order) we are at your service.

BARKER, DRABBLE & CO.

The Able and Reliable Service Agents. **88-90 CHANCERY LANE, LONDON, W.C.2**

Telegrams: "Zealuserve, Phone, London." *Telephone: Holborn 5176.*

Will you write us to-day; or a consultation places you under no obligation.

MANY SUCCESSES IN THE EXAMINATIONS!

Your Opportunity to

QUALIFY IN OPTICS

PRACTICAL WORK. Students taking the Course may receive personal tuition in the practical work AT ANY TIME DURING THE COURSE.

Expert Tuition for the SIGHT-TESTING DIPLOMAS of the Worshipful Company of Spectacle Makers (F.S.M.C.); the British Optical Association (F.B.O.A.), or the National Association of Opticians (F.N.A.O.).

Write for full particulars—

C.A.SCURR,M.P.S.,F.S.M.C.,F.B.O.A.,F.N.A.O.,B.Sc.,F.I.O.
50 High Street BARNET
(N.Z. Representative: C. AITCHISON, PALMERSTON Nth.)

WESTMINSTER
COLLEGE OF PHARMACY.

Principals:
G. S. V. WILLS, Ph.C. (Founder), P. H. WOODNOTH, Ph.C., F.C.S.
Assisted by J. G. EVERETT, Ph.C., Council Medallist.

EVENING CLASSES:
Wednesday and Thursday, 6.0 to 8.30.
3 months, 21/-; 6 months, 37/6; 9 months, 52/6
REVISION COURSE, January 5, 1925
Fee, 10 guineas.
PASSES—Session 1923-24, 50; Part 1, 26.

Full details will be sent on application to
The Principals, 190 Clapham Road, London, S.W.9

Opportunities for Retailers

We often take back used Cash Registers when customers are installing larger or more up-to-date machines. These National Cash Registers

Thoroughly Overhauled and Rebuilt

are sold under the Company's full guarantee at reduced prices.

Write for details of "Nationals" available:—

Dept. R.2, The National Cash Register Co. Ltd.
225 Tottenham Court Rd., London, W.1.

BRITISH OPTICAL INSTITUTE Ltd.

(College of Optics),
FERN LODGE, 20a GROVE ROAD, BRIXTON, S.W.9.

COMPLETE TRAINING FOR THE SIGHT-TESTING OPTICIAN.

Successful Postal Courses in preparation for the recognised Optical Examinations include special facilities for acquiring a sound knowledge of Optical Work in all its branches.

The Institute is under the personal supervision of the Principal, assisted by Mr. G. W. Colebrook, F.B.O.A. (Hons.), F.S.M.C. (Master's Prizeman).

Theoretical and Practical Classes are held on two afternoons a week all the year round. Revision Classes are held daily during the month preceding each examination.

A special feature of the Scheme of Instruction is the Clinic held twice a week, when Students have the opportunity of seeing and handling actual cases.

Weekly evening classes are held during the Winter months.

For fully detailed prospectus, please apply to the Principal, **Dr. MAX COQUE, B.Sc.** Telephone: Brixton 677.

KODAK FILMS
DEVELOPED AND PRINTED
SAME DAY

Bright Sparkling Results that will help you Build Business. Moderate Charges. Wholesale Terms. Unfailing Service. Write for List and Terms.

WALLACE HEATON LTD.

17-27 CHANGE ALLEY - SHEFFIELD.
We buy overstocks of cameras for cash and offer big prices.

WOODWARD'S "GRIPE WATER"

Sales are still increasing
So are the Trade margins

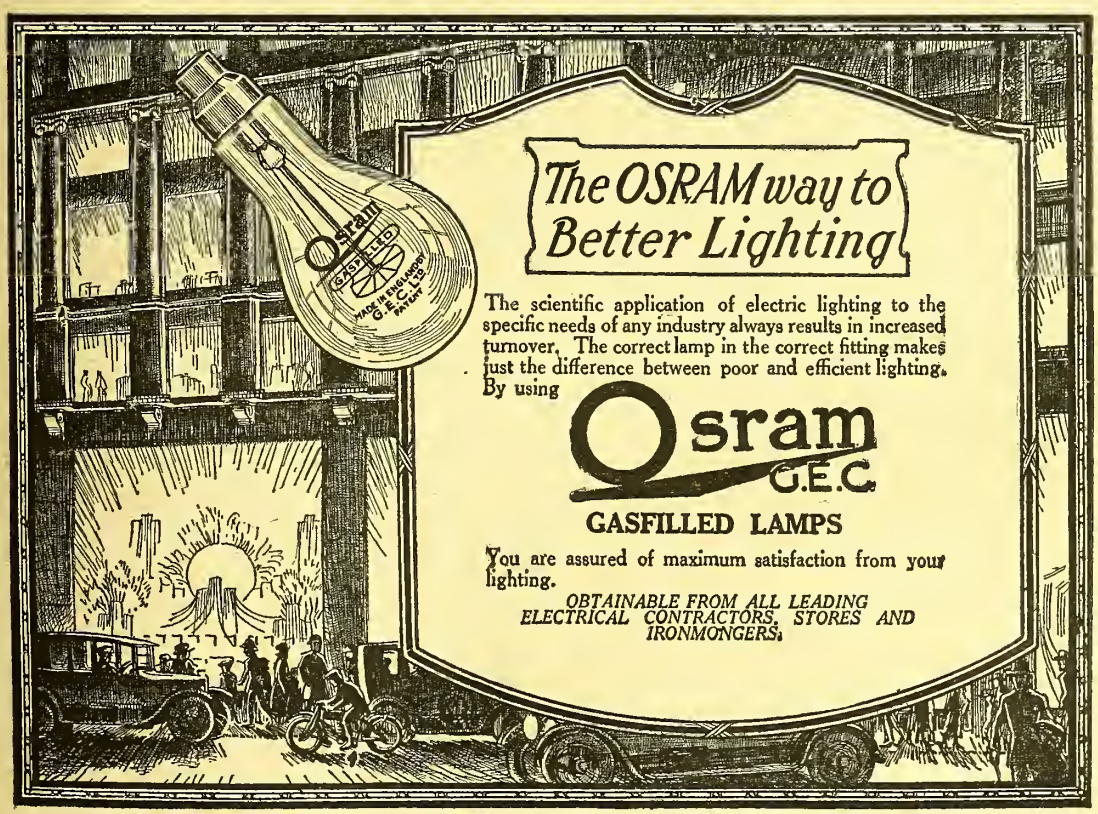
The Trade are asked to note that beginning at once a further improvement in discounts is (with the agreement of the P.A.T.A. and the Wholesale Trade) now in force.

Current terms are: Gross lots, **11/6** doz.
½ „ **12/-** „
Smalls **12/5** „ (hitherto 12/8 doz.)

Please note no order less than 6 doz. can be accepted direct. Smaller orders should be placed with the Wholesaler.

Trade Mark

W. WOODWARD, LIMITED, Manufacturing Chemists
79-87 FORTESS ROAD, LONDON, N.W.5.



Advt. of The General Electric Co., Ltd., Magnet House, Kingsway, W.C.2

NEW and REVISED TRADE TERMS FOR "RODINE"

17th November, 1924.

Retail Prices .. .. 7½d., 1/3, 2/6, 5/-.
Price per Doz. .. .. 5/-, 10/-, 20/-, 40/-.
Minimum Order of £1 10s. sent carr. paid less 10 per cent. discount.
" " £6 " " " 12½ " "
" " £12 " " " 15 " "
P.A.T.A., Cash with Order.

Note.—£1 7s. nett is now smallest quantity sent carriage paid.

The above Terms for all Chemists come into force on Monday, 17th Nov., 1924. Orders received on and after that date will be charged at the new prices.

Get best terms. *Order direct from the Maker.*

THOMAS HARLEY
Manufacturing Chemist,
PERTH, SCOTLAND.

Sole distributing Agent for Irish Free State.
MAY, ROBERTS & CO. LTD.
Westmoreland Street, DUBLIN.

FAMOUS HB BRIARS
and other well-known BRANDS OF PIPES and all TOBACCONISTS' FANCY GOODS
HARWOOD BROTHERS, *Manufacturers*
Est. 1898 115 ISLINGTON, LIVERPOOL

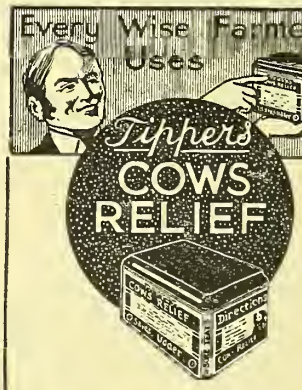
SHERLEY'S DOG MEDICINES INSECT POWDER SHAMPOO, and LACTOL
(P.A.T.A.)

These preparations command a ready sale, and are by far the largest advertised of any on the market. They are protected at prices that leave an excellent margin of profit for the retailer, and the terms on which they are supplied preclude any possibility of loss.
We have an excellent range of literature and show cards, and do all in our power to assist chemists by referring mail customers to them.
Write for Price List and Terms.

A. F. SHERLEY & CO., LTD.
18 MARSHALSEA ROAD, LONDON, S.E.1
Tel. No.: Hop 1897. Telegrams: "Sherleydom, London."

G·A·LEJEUNE 28A CHANDOS ST. LEICESTER.

EFFECTIVE ADVERTISING MATTER AT SMALL COST



RETAIL PRICES.
2/9, 6/-, 14/-, and 21/- per tin.
Invoiced to the Trade at 2/6, 5/6, 13/6, and 20/- respectively, and subject to 20% discount.

Carriage paid on orders of 40/- net. Postage charged on small lots.

B. C. TIPPER & SON,
The Veterinary Chemical Works,
BIRMINGHAM.

CORKS for Chemists.

Send us your Enquiries
and compare our prices.
Wholesale & Export Only.

C. OLLEY & SONS, LTD.
Established 1844.
Camperdown St. and Gt. Alie St., London, E.1
Tel. No : Avenue 6630. Tel. Ad.: "Circumference, Ald, London."

METALLIC CAPSULES
for all kinds of Bottles and Jars.

The Tonkin Metallic Capsule Co.
Proprietors: C. Olley & Sons, Ltd.

Glass Bottles

Speciality :
MEDICAL DISPENSING BOTTLES OF ALL KINDS

Wholesale & Export
W. SMITH, Senior
169-170 Railway Arches, Braintree St.
Cambridge Road, Mile End, E.2.
Telephone No. East 5578 *Estd. 1880*

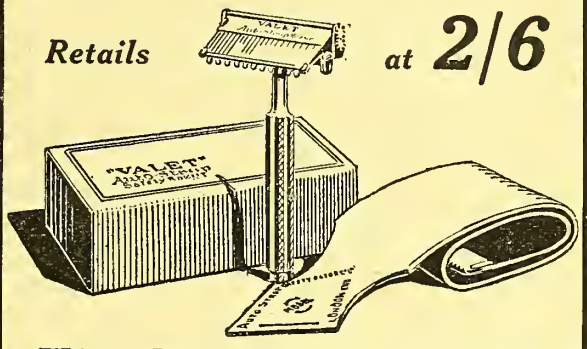
VISKAP
SELF - FIXING BOTTLE CAPS
Transparent, Opaque, or Coloured.

From the Manufacturers:
THE VISCOSE DEVELOPMENT Co., Ltd.
Viskap Works,
BROMLEY :: KENT

THIS "VALET" CONCESSION MEANS TO YOU

76% PROFIT

Retails at 2/6



The Scheme is Simple

For every 3 doz. of the popular 2/6 Razors ordered, a Guinea Razor is given FREE with orders placed before November 30th.

Thousands of these are being sold and thousands more will surely be sold before Xmas.

The Inducement Great

1 Guinea Razor free with 3 Doz.
2 „ „ „ „ 6 „
4 „ „ „ „ 12 „
8 „ (The Limit) „ „ 24 „

IMMEDIATE DELIVERY
AND EFFICIENT SERVICE
IF ORDERED NOW
FROM

WARDS of WARRINGTON

PRECIPITATED CHALK

LIGHTEST, MEDIUM, DENSE
And All Other Grades To Suit Every Purpose
CHEMICALS: Fine and Heavy.

'Phone: Central 4613. Tel. Add.: "Levermore, Phone, London."
A. LEVERMORE & CO., LTD. ABC Codes
8-10 GT. ST. HELENS, LONDON, E.C.3 5th & 6th Editions

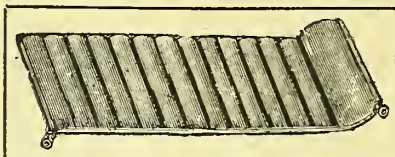
FREDK. FINK & CO.
10 & 11 MINCING LANE, LONDON, E.C.3.
SPECIALITIES.—Gums Arabic and Tragacanth as Imported or finely powdered

---

XMAS WINDOW TICKETS & WINDOW POSTERS

produced in Artistic & Refined Colorings for advertising Christmas Presents
List No. C.D. 795 Showing 100 Designs Free
DUDLEY & COY HOLLOWAY RD LONDON. N.

OPTICAL EDUCATION.
CENTRAL COLLEGE OF OPTICS
Individual CORRESPONDENCE Tuition.
Preliminary Education. Advanced Optics.
Apply:—Registrar, 89, Empress Avenue, Ilford, Essex.



Makers:
Geo. MacLellan & Co., Ltd.,
Makers of everything Waterproof and Rubber
Established 1870.
Glasgow Rubber Works, Maryhill, Glasgow

EBONY TOILET ARTICLES
FOR THE XMAS TRADE.
Please write for Illustrated Catalogue.
THE GALEN MANFG. CO. LTD., WILSON STREET NEW CROSS, S.E.14

TINORI
PAINLESS CORN CURE } NEVER FAILS

FOR KEENEST WHOLESALE PRICES OF
GILLETTE BLADES
U.S.A. 5's & 10's or 6's & 12's AND CANADIAN 6's & 12's.
IN SMALL OR LARGE QUANTITIES.
L. J. STAMBOIS, 34 Call Lane, Leeds.

SMELLING SALTS
ACTINIC GREEN, CLEAR WHITE **BOTTLES**
Samples on application Prompt delivery.
C. HAVILL, (Succeeding Oakes, Bromley & Co., Ltd.),
Suffolk House, Lawrence Pountney Hill, London, E.C.4.

Advertised daily in all London daily papers
Tatcho-tone
For GREY HAIR
PRICES: 8d. Trial phial, per doz. 5/9
4/6 Large size, per doz. 42/-
TATCHO-TONE CO., 5 Gt. Queen St., Kingsway, W.C.

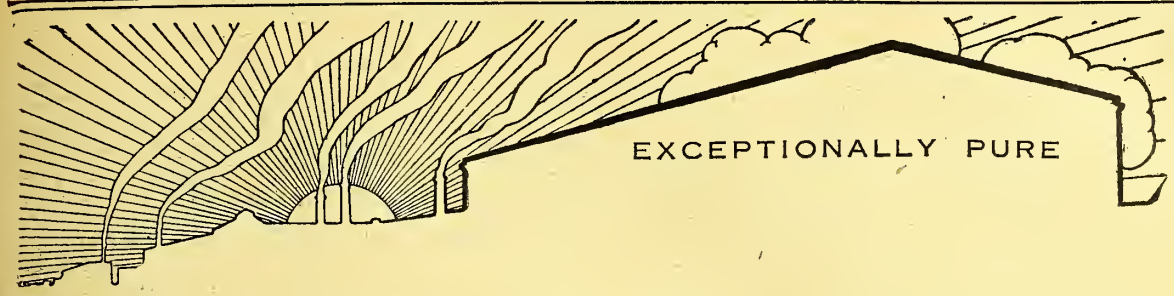
FACE POWDER Any Grade Any Colour Any Quantity
No order too large—none too small.
COLD CREAM—VANISHING CREAM
MASSAGE CREAM—TALCUM POWDER
All Merchandise in Bulk or in your own Containers.
Drug Grinding done for the Trade.
The O-PINE-O Manfg. Co. Ltd., Montague Rd., Hornsey, London, N.8

FOR COMMERCIAL USE
Envelopes FROM **1/11** PER 1,000
FULL SAMPLE SET OF ENVELOPES SENT FREE ON APPLICATION
J C KING LTD 42-60 GOSWELL RD LONDON. E.C

TINS BOXES & CANISTERS (made in our own works) at keenly competitive prices.
Let us quote for any kind or size you need. Or ask for list of STOCK TINS
GOODALL, BACKHOUSE & CO., Leeds.

SHADEINE
For COLOURING GREY HAIR
This popular article is largely advertised and stocked by all Wholesale Houses.
Trial size 8d. per doz. 6/-
1/4 size, per doz. 12/-
2/6 size, per doz. 24/-
3/9 size, per doz. 36/-
The SHADEINE CO., 58 Westbourne Grove, London, W.2.

PYSHAN POINTS TEA
If increasing your business every day is of paramount importance to you, and we reckon *it is*,—then investigate our P.P.T. plan at once—lose no time—get sample and "Every Day More Business" circular. NO ADVERTISING THAT A CHEMIST CAN DO BRINGS IN SO GOOD OR BETTER RETURNS at so trifling an outlay. 4
THOS. CHRISTY & CO., 4-12 Old Swan Lane, E.C.4



TRADE MARK 'WELLCOME' BRAND

Quinine Sulphate, B.P.

Other Quinine Salts issued under the 'Wellcome' Brand are :—
Quinine
Bihydrochloride
Bisulphate
Hydrobromide
Hydrochloride
Salicylate
etc., etc.

THIS Salt answers, in addition to the tests of the B.P., the much more stringent demand of the 'WELLCOME' ammonia test.

Pharmacists who pride themselves on the *quality* of the drugs and chemicals used in their dispensing departments, will appreciate the fact that 'WELLCOME' Brand QUININE SULPHATE is exceptionally pure, uniform and reliable.

For full list and prices, see 'Wellcome' Brand Chemicals and Galenicals Price List

BURROUGHS WELLCOME & CO., LONDON

G 1177

COPYRIGHT

WARRICK
BROTHERS, LIMITED

AMULETS.
CACHETS, & APPARATUS.
CACHOUS.
CAPSULES.
CHANTICLEER PASTILLES.
CHAPIREAU'S CACHETS.
CHOCELLÆ.
CINET GOODS.
COMPRESSED TABLETS.
CRYSTADES.
EAU DE COLOGNE.
ESSENTIAL OILS.
EXTRAITS AUX FLEURS
FIZZZLETS. *(Suspended.)*
FLEXETTES.
FLEXOIDS.
FRAGRETS.
JAPADUMS (CINET).
LOZENGES.
LUBRILAX.
NORETS.
NOSTRONES.
ORIFORM LOZENGES.
OTTOLETTES.
PASTILLES.
PERFUMES.
PERFUMETTES.
PERLES.
POMADES (FLORAL).
POT POURRI (CINET).
PULVELLÆ.
REFRESHLETS.
ROSE WATER.
SACHETS.
SYNTHOROSE.
TOILET SOAPS.
WALMSLEY CLEANING PADS.
ZEPHYR BUTTONHOLES.
ZOMBS.

Also Special Agents for
JELLOIDS.
IRON JELLOIDS.
DULCILAX.
MADDOCKS' PERFUMERY.
HENDRIE'S „

6, Nile Street, City Road, London, N.1

Telephone : CLERKENWELL 2452. Telegrams : "WARRICKERS NORDO, LONDON."

CORRESPONDENCE FROM OVERSEAS SOLICITED.

THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

A WEEKLY JOURNAL OF PHARMACY AND OF THE CHEMICAL AND DRUG TRADES

THE CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in the Overseas Dominions.

SUBSCRIPTION RATE

TWENTY SHILLINGS a year payable in advance to any part of the world, including a copy of *The Chemist and Druggist Diary*. Subscriptions may begin with the first issue of any month. Single Copy, 9*d.*, post free; *Diary*, 10*s.*, post free. Postal orders and cheques should be crossed "Bank of Liverpool and Martins, Ltd."

Prix de l'abonnement annuel: le journal une fois par semaine, et l'agenda une fois par an, 20*s.*, franco.

Il prezzo dell'abbonamento annuo è di 20 sc. franco, e s'intende per un numero settimanale del periodico ed un esemplare del diario annuale.

El mejor periódico semanal publicado en Inglaterra, su précio es de 20 chelines por año, indispensable para la indústria. Tambien el Editor facilita á sus Abonados por mediación del mismo periódico información respeto á todo lo que sea en el ramo de química. Ejemplar 1 chelin.

TERMS FOR ADVERTISING may be obtained on application to the Publisher.

Head Office: 42 CANNON STREET, LONDON, E.C.4

Telegrams: "Chemicus, Cannon, London." Telephone: Central 3617 (3 lines).

Branch Offices: 49 County Buildings, 4 Cannon Street, Manchester. (Telephone: City 52.)

Melbourne and Sydney, Australia.

Contents

No. 20 Series 2338 Vol. 101

	PAGE		PAGE
Bankruptcy Reports	703	Legal Reports	703
Births	713	Marriages	713
Business Changes	706	New Companies	704
C. & D. Commercial Compendium	731	Observations and Reflections	715
Chemical Society	718	Opium Conference	719
Colonial and Foreign News	702	Personalities	713
Coming Events	704	Pharmaceutical Society of Great Britain	706
Correspondence:		Poisonings	702
Letters	727	Recent Patents	704
Legal Queries	728	Retail Pharmacists' Union	721
Miscellaneous Inquiries	729	Retrospect	730
Deaths	713	Reviews of Books	709
Editorial Articles:		Scottish News	701
Irish Pharmacy Bill	716	Spanish Olive Oil	705
Weakness in Mercury	717	Ten Years of History	707
Soviet Foreign Trade Policy	718	Trade-marks	714
English News	699	Trade Notes	714
Festivities	721	Trade Report	722
Information Department	714	Wills	705
Irish News	701	Winter Session	720

C. & D. Stocktaking Sheets

We have this week published a new edition of the *C. & D.* Stocktaking Sheets, which were originally brought out in 1923. A large edition of the work has been sold, and the claims made that the *C. & D.* Stocktaking Sheets halve the labour of stocktaking have been fully proved by the many chemists who use them regularly. The new edition is prepared on exactly the same lines as the first edition, but we have taken the opportunity of including further items in the drug and chemical list to correspond with improvements made in the *C. & D.* Retail Price List. These additions have increased the number of pages, and in accordance with numerous suggestions more blank pages have been provided at the end. The price of the complete pad of Stocktaking Sheets is 2s. 6d., post free, cash with order.

English and Welsh News

The Editor would be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

The Royal Society

The following is a list of those recommended by the President and Council for election to the Council on December 1:—

The Earl of Crawford and Balcarres and Sir Otto Beit have been elected Fellows of the Society.

Mrs. Tyndall, widow of Professor John Tyndall, F.R.S., has made a donation of £500 to the Society.

President, Sir Charles Sherrington; *Treasurer*, Sir David Prain; *Secretaries*, Mr. W. B. Hardy and Mr. J. H. Jeans; *Foreign Secretary*, Sir Richard Glazebrook; *Other Members of Council:* Sir Frederick Andrewes, Professor J. H. Ashworth, Dr. F. W. Aston, Sir William Bragg, Professor S. Chapman, Sir Dugald Clerk, Dr. H. H. Dale, Professor F. G. Donnan, Professor A. S. Eddington, Professor E. S. Goodrich, Sir Thomas Holland, Professor J. B. Leathes, Professor T. R. Merton, Dr. G. C. Simpson, Professor J. F. Thorpe, and Professor F. E. Weiss.

The King has approved of the award of a Royal medal to Dr. H. H. Dale, F.R.S., for his researches in pharmacology and physiology. Dr. Dale is head of the Department of Bio-chemistry and Pharmacology under the Medical Research Council. He was director (1904-14) of the Wellcome Physiological Research Laboratories, and during that time carried out research on the physiological action of digitalis in collaboration with Mr. F. H. Carr, F.I.C.

The following awards have been made by the President and Council: The Rumford medal to Mr. C. V. Boys, F.R.S., for his invention of the gas calorimeter. Mr. Boys has studied photographically the motion of projectiles and of the air through which they move, and has published a series of researches on soap films and their behaviour. The Davy medal to Professor A. G. Perkin, F.R.S., for his researches on the structure of natural colouring matters. Professor Perkin is a son of Sir William Perkin, and has long been interested in problems associated with the dyeing industry. He was one of the experts who contributed to the recent Government report (*C. & D.*, September 13, p. 387) on fur dermatitis.

Ramsay Memorial Laboratory

On November 12, Prince Arthur of Connaught opened the Ramsay Laboratory of Chemical Engineering, at University College, London. In the course of his speech the Prince said: "The subject is a new one, and the College authorities have deemed it best for the first five years to use the present buildings, which have been specially adapted and equipped for the purpose, and to defer the erection of new laboratories so that they may gain experience during that period of the soundest and most useful lines on which the permanent buildings should be erected. A sum of approximately £1,390 a year for five years has been provided by chemical firms or members of chemical firms. Without that help it would have been impossible to carry the scheme to a successful issue, and even now further financial support is needed." Mr. W. J. U. Woolcock, President of the Society of Chemical Industries, who also spoke, remarked that after the war it became apparent that there was a type of man badly wanted in this country intermediate between the chemist and the engineer, and he welcomed the first laboratory started to produce that urgently needed link.

Motoring Cases

At Knaresborough, recently, Henry McGeorge, chemist, was fined 2s. 6d., with costs, for driving a motor-cycle to the danger of the public. It was stated that the defendant had fractured a leg and both his arms in a collision.

At Marlborough Street Police Court, London, on November 10, Frederick J. Barnes, music-hall artist, was sentenced to a month's imprisonment in the second division, fined and ordered to pay costs on charges

connected with the driving of a motor-car. Mr. J. D. Cassels, K.C., for the defence, urged that the defendant was in a neurasthenic condition and had taken five tablets of Easton's syrup during the day in question. Notice of appeal was given.

At Bow Street Police Court, London, on November 7, William T. A. Proctor, described as a managing director, was charged with being drunk while in charge of a motor-car and with dangerous driving. The defendant, in evidence, said that on the day of his arrest he had been to his company's works in Croydon, and for about two hours was in and out of a chamber where he had to breathe the fumes of trichlorethylene. The workmen engaged always wore masks, but he did not put one on. Dr. R. M. Brontë, pathologist to the Home Office, said that if the fumes of trichlorethylene were inhaled in sufficient quantity they might produce the appearance of drunkenness. Brandy taken by the defendant would temporarily counteract the effect of the gas. The magistrate dismissed the charge of drunkenness, but on the charge of driving to the common danger fined the defendant £5, with £5 5s. costs.

Inquests

The Portsmouth coroner held an inquiry, on November 5, concerning the death of Alice M. M. Stubbs, wife of a postman. The widower stated in evidence that his wife made a communication to him about a month ago, and asked him to get some "stuff." He refused for several weeks, but eventually went to Lloyd's, Lake Road. Mr. Lloyd said he had three sorts of pills, one priced 2s., and mixture to go with them—10s. a bottle. Witness purchased the mixture and pills. There was a pamphlet with the pills, but it had been mislaid or lost. Ralph Edward Victor Lloyd, after being cautioned, said he was a herbalist managing for his wife, whose business it was at 23 Lake Road. He himself went bankrupt some short time ago. Witness had a faint recollection of Mr. Stubbs calling on him. Mr. Stubbs made a communication to him, but did not say his wife was pregnant. Witness told him he was not allowed to sell anything in such a case, and Mr. Stubbs was not allowed to buy it. Witness supplied a mixture he had bought from a London firm. The Coroner: Do you know anything about drugs? Not a great deal. The witness added that he thought that the drugs were not dangerous or likely to bring about abortion. He gave 19s. 6d. for a 6 lb. bottle of the mixture and sold it in small bottles at 10s. 6d. He genuinely thought it was a mild aperient. He had had a letter from the manufacturers stating that there was nothing at all dangerous in either the mixture or the pills. The Coroner: Are you a chemist? No, sir. Questioned by a member of the jury, witness said that if anyone came to him for anything for pregnancy he would show them the door. Medical evidence was given to the effect that death was due to air embolism, following miscarriage. There was nothing to show there had been any poisoning. Mr. R. P. Page, F.I.C., public analyst, said the drugs were not known to him personally. Their general tendency was irritation, but, strictly speaking, there was nothing poisonous in them. There was no legal objection to a herbalist selling the drugs. It was quite consistent that some would act as purgatives. The coroner said that it was a very difficult case. With regard to Mr. Lloyd, what was the object of the business he carried on? If he told people the drugs were only mild aperients the coroner did not think anyone would pay 10s. 6d. for a small bottle of mixture or 2s. for the pills. Legally the coroner did not think they could bring blame home either to the husband or to Lloyd. He suggested that the verdict should be "Death from air embolism following miscarriage," and the jury concurred.

Birmingham

Lozenges displayed in a local pharmacy window were quite spoiled by the sun shining on them a few days ago.

Considerable development has taken place in this city, within the last few weeks, in the character and size of illuminated advertising signs.

The annual dog show, which was held in the Bingley Hall on November 12 and 13, attracted a good number of chemists, most of whom showed a wider interest than that of supplying canine foods and medicines.

The local section of the Society of Chemical Industry held the first meeting of the session on November 11, when papers on the following researches from the chemical department of the University of Birmingham were presented:—(1) "Studies in the Acenaphthene Series, Part I, 2—Aminoacenaphthene," by G. T. Morgan and H. M. Stanley; (2) "Researches on Molybdenum Salts," by W. Wardlaw, F. H. Nicholls, and R. L. Wormell; (3) "Observations on the Higher Fatty Acids," by G. T. Morgan and A. R. Bowen; (4) "Researches on Residual Affinity and Co-ordination, Part XXIII, Trialkylstibine Derivatives of Platinum and Palladium Chlorides," by G. T. Morgan and V. E. Yarsley.

Hull

A local chemist finds that his best advertisement is that shown on the screen of the nearest picture theatre.

The vagaries of our English climate have been responsible for much poor business for Hull chemists during the summer months, but since the recent cold snap better times have been experienced.

At the last meeting of the Hull Pharmacists' Association several mounted specimens of medicinal plants were on view. These plants, which were grown at Scarborough, will be shown to the public during Education Week.

When a member of the Hull Pharmacists' Association was proposing the election of a new member, he could not recall the name, and as the prospective member was not present, someone suggested the name of Mr. X. The president turned to the meeting for approval of this suggestion, whereupon someone remarked that the new man might be cross!

Liverpool

Mr. W. H. Saunders left Liverpool on November 12 for a visit to Egypt.

A slight decline in retail trade as compared with an agreeable boom last week is reported.

An old-established central area pharmacy in the hands of executors is likely to be absorbed by a company with several pharmacies, all on Merseyside.

Mr. T. Edward Lescher, a director of Evans Sons Lescher & Webb, Ltd., was among the guests invited to attend the Lord Mayor of London's banquet.

The Liverpool Pharmacy Club is on the look-out for a new secretary, Mr. W. J. Tristram finding that his business demands more and more of his time.

Two Irishmen bound for Canada entered a down-town pharmacy and each took at the counter a dose of castor oil. Each in turn held the nostrils of the other pending the swallow!

Manchester

The dense fog which enshrouded the city for over twenty-four hours, on November 5 and 6, was responsible for an increase in the sale of chest and lung remedies.

Manchester Corporation has accepted the following tenders: J. T. Dobbins, Ltd., dressings; W. W. Hill, Son & Wallace, Ltd., turpentine; Methylating Co., Ltd., methylated spirit; Surgical Manufacturing Co., London, sundries; James Woolley, Sons & Co., Ltd., drugs.

At last an ambition of Manchester pharmacists has been realised. By the splendid effort made at the recent Chemists' Exhibition, a good sum was raised for the Benevolent Fund and Orphan Fund of the Pharmaceutical Society; the total contribution (with the generous donation from an anonymous sympathiser) comes to over £152. This sum is a record for any one effort made by the Manchester pharmacists, who have always envied the success achieved by their Liverpool *confrères*, but now are quite pleased that they have been able to beat Liverpool's total for one year at least.

Sheffield

Much sympathy will be felt for Mr. J. P. Hewitt, the oldest chemist in Sheffield, who has had a slight stroke.

Mr. L. Turner, chemist and druggist, Leigh, Lancs., has acquired the business of Mr. R. E. Wardell, chemist and druggist, 321 Glossop Road, who is removing to the Chesterfield district.

The new premises which are being erected in West Street for Messrs. Preston, Barker's Pool, will, when completed, be among the finest in the provinces for chemical and scientific appliances.

In the early part of 1922 the panel list of chemists contained the names and addresses of 55 chemists and 85 establishments. At the present time, there are 69 chemists with 96 places of business.

Miscellaneous

FIRE.—There was a slight outbreak of fire, on November 8, at the premises of B. Petronzio & Sons, toilet requisites manufacturers, Holloway Road, London, N. The outbreak, which was attributed to a light being thrown down, was confined to a room on the first floor.

CHRISTMAS CLOSING.—The Bradford and the Doncaster Chambers of Trade have considered a proposal in favour of four days' holiday at Christmas, but have decided that it is not practicable in the public interest, and recommend their members to close all day on Thursday (Christmas Day) and Friday (Boxing Day), reopening on the Saturday.

ROYAL INSTITUTION.—The juvenile lectures this Christmas will be delivered by Mr. F. Balfour Browne and will deal with: (1) Insect collecting; (2) habits of bees and wasps; (3) habits of caterpillars; (4) habits of the dragonfly; (5) habits of the waterbeetle; (6) habits of insects and the work of man. The first lecture will be given on December 27 and the succeeding ones on December 30, January 1, January 3, January 6, and January 8.

MINERALISED METHYLATED SPIRIT.—The Council of the British Medical Association has addressed communications to the Board of Customs and Excise urging that the matter of pyridinised methylated spirit should be dealt with as soon as possible. The Department has replied that it is hoping to arrive at a solution of the difficulty in a short time, but that, meanwhile, applications from *bonâ-fide* nursing homes and hospitals for permission to receive industrial methylated spirit will be considered, provided that the spirit is used strictly for surgical and medical purposes and not for burning. The necessary forms of application may be obtained from local officers of Customs and Excise.

FOOTBALL.—In Hyde Park, London, recently, the May & Baker F.C. met with their first defeat of the season, being beaten by the Irish Guards in the Belgrave Hospital Charity Cup competition by four goals to *nil*. —A team of Blackpool chemists was defeated, recently, by the local shop assistants by eight goals to one. Moorhouse scored for the chemists.—In the London Business Houses League, The British Drug Houses, Ltd., have recently defeated Leadenhall Press by four goals to three, lost to Blades by 7—2, and to Minerva Athletic by 4—1. In the London Commercial League, on November 8, they were successful (3—2) against De la Rue.— A football match was played on November 8 between the Battersea and Fulham branches of Whiffen & Sons, Ltd. The result of an exciting game was a win for Fulham by 3 goals to 2. After the match the teams and their friends were entertained to tea.

ROYAL SOCIETY OF ARTS.—Under the Peter Le Neve Foster Trust the Council of the Royal Society of Arts offers a prize of £25 for an essay on "The Effect of Trade Union Regulations on Industrial Output." Competitors must send in their essays not later than March 31, 1925, to the Secretary, Royal Society of Arts, John Street, Adelphi, London, W.C.2.

Scottish News

Brevities

Bailie G. Hicks, chemist and druggist, Rothesay, has been appointed Provost.

In connection with the Scottish municipal elections, the following pharmacists are among the successful candidates: Messrs. J. M. M. Anderson, Forres; R. Mathieson, Innerleithen; A. Robertson, Paisley; J. Walker, Ellon; W. Watts, Crieff.

It was decided at a meeting held at 36 York Place, Edinburgh, on November 7, to continue the activities of the Edinburgh Chemists' Golf Club, and the following office-bearers were elected:—*Captain*, A. Kelly; *Vice-Captain*, W. J. Rosie; *Secretary*, E. Couper; *Treasurer*, A. Henderson; *Committee*, Messrs. Brindle, Brown, Clark, Finlay, Gibb, Manson and Scott. A whist drive has been arranged for December 10.

Glasgow

The Scottish Office announces that Professor H. H. Dixon, F.R.S., Sc.D., has intimated that owing to private reasons he is unable to accept appointment to the Regius Chair of Botany, Glasgow University.

An interesting lecture on "Size as a Limiting Factor in Plant Structure" was given by Professor F. O. Bower, F.R.S., at a meeting of the Biological section of the Royal Philosophical Society of Glasgow, on November 7.

At the annual general meeting of the Glasgow and West of Scotland Section of the Institute of Chemistry, on November 4, Professor F. J. Wilson was elected to the chair and Dr. W. M. Cumming was re-elected secretary.

A whist drive under the auspices of the Glasgow Pharmacy Club was held at 165 Hill Street, on November 4. The prize-winners were: *Ladies.*—(1) Miss A. McCallum; (2) Miss S. Laurie. *Gentlemen.*—(1) Mr. J. Dawson; (2) Mr. J. T. Simpson. The first prize for the ladies (an antique brooch) was presented by Miss Ross. After tea, an excellent musical programme was provided by Miss S. Laurie. Miss P. Robb, Mr. Gracie and Mr Moore, with Mrs. Munro as accompanist.

Irish News

Brevities

Mr. James Arnold, R.D., will shortly open a business at Gilford, co. Down.

Mr. F. J. Fitzpatrick, M.C.P.S.I., is convalescing at Nice, after his recent operation.

The advances paid to the Claims Fund (Intoxicating Liquor Act, 1923) for the compensation of chemists and spirit grocers during October were £50,000, making a total of £136,500 to date.

At the Dublin District Court, on November 7, Hyman Musbak, described as a chemist, 3 Frances Street, was fined for having failed to close his premises at the prescribed hour on October 11.

The death has taken place at the Rectory, Corofin, co. Clare, of the Rev. J. H. Chapman, aged eighty-seven. Mr. Chapman was in the firm of Chapman & Co., druggists, Ann Street, Belfast, prior to entering the ministry.

At the Licensing Compensation Tribunal for co. Tyrone, which sat recently in Omagh to deal with compensation claims, the following awards were made to chemists: H. & R. Lyons, Ltd., Omagh, £53 4s. 7d.; McAdam & Bates, Omagh, £280; John Deery, Newtownstewart, £174; Robert McCay, Castlederg, £102.

Belfast

Before Mr. Justice Brown, in the King's Bench Division recently, Hugh Marshall & Co., Ltd., chemists, 19 Mill Street, Belfast, sued James Anderson, 26 North Street, to recover £12, loss and damage alleged to have been sustained by reason of the negligence of the defendant and his servants. The case came up on appeal

from the County Court, in which a decree for £10 was given On hearing the evidence, his lordship reversed the decree and dismissed the action.

At Belfast Police Court, on October 31, A. D. Porter, Victoria Street, was summoned at the instance of the Ministry of Agriculture for selling, for use as food for cattle or poultry, fish meal containing an excessive quantity of oil. He was also prosecuted for failing to supply a customer with an invoice giving particulars of the ingredients of the meal. Mr. Mussen, who prosecuted, dealing with one of the charges of selling meal which contained an excess quantity of oil, said that when the amount of oil in the meal exceeded 5 per cent. it imparted a fishy flavour to the bacon. Dr. G. S. Robinson, analyst, said the percentage of oil in the meal was 8.86. A fine of 10s. was imposed in each case.

Poisonings

THE following cases of fatal poisoning, among others, have been recorded since our last report :—

An inquest was held at Leeds, on November 8, on the body of Mr. Robert Hardwick Hall, M.B., who was found unconscious in bed, with a bottle containing chloroform and a serum syringe by his side. A brother, also a bachelor of medicine, gave evidence to the effect that death was due to a hypodermic injection of morphine. The verdict set forth that the deceased was of unsound mind at the time of the suicide.

On November 7, the deputy-coroner for South-West London held an inquest on the body of Mr. Charles Breese, chemist and druggist, 73 and 119 Mitcham Lane, S.W. Mr. M. C. Breese, a son, in practice as a medical man at Melton Mowbray, said that his father had complained of being worried about income-tax. His business was flourishing, and he had no financial worry. Miss Amelia Bateson stated that she was a qualified dispenser of medicines, and assisted the deceased in his business. On November 1 she told him that she was about to leave him, and that she had put an advertisement in "The Times" for another situation. About half past 9 o'clock that night, Mr. Breese picked up his coat and hat and went out. As he did not return, she thought he had gone to some friends. The following afternoon, from what she was told, she went to No. 119 and found him seated in the office with his hat and coat on. She noticed a glass with a white powder in it and said, "You have taken morphine." He replied, "I think I have, but not much." She at once sent for a medical man, who attended Mr. Breese several times that evening and the following day. During this time he appeared strange, and on one occasion smashed the window. Mr. G. G. Roe, L.R.C.P. Edin., who had known the deceased for twenty years, stated that he was called on November 2 to No. 119, and asked him if he had taken anything. He replied that he was not sure; he thought he had taken some morphine, but not too much. Witness took him home in his car and treated him until his death. Mr. Breese was able to walk from the office to witness's motor-car. He appeared quite rational. He subsequently became unconscious and remained so till his death. Another witness, who made a *post-mortem* examination, said that morphine was present in the stomach. All the appearances were consistent with death from morphine poisoning. Mr. Breese's son recalled, said that he was perfectly satisfied that Miss Bateson had done everything she possibly could for the deceased. The deputy-coroner said that there was just sufficient evidence for him to say that it was not a case of suicide. He recorded a verdict of "Death from misadventure."

FASHION IN RAT POISONS.—A statement made by a director of the Rodent and Insect Pest Destruction Society, concerning this year's "rat week," includes the remark that red squill is the most popular poison used, and that phosphorus preparations are not so much in vogue as formerly. The gases experimented with included chlorine, phosgene, sulphur dioxide, hydrocyanic acid, and carbon disulphide.

Colonial and Foreign News

VANADIUM EXPORT TAX.—An order dated September 3 introduces an export tax of $1.50 per ton of vanadium exported from Peru. This tax is liable to alteration every quarter, according to the market price ruling in the United States.

TURKISH CUSTOMS REFORMS.—It is reported from Constantinople that far-reaching reforms are shortly to be introduced in the Turkish customs policy, designed to facilitate trade with foreign countries. The administration of the customs is having the French and German customs tariffs translated, and it is stated that many of their features will be embodied in the new tariff. Further, steps are being taken to reorganise the customs *personnel*, to put an end to corruption and to simplify the formalities attending the clearance of goods.

ADVERTISING SALTPETRE.—The Association of Chilian Saltpetre Producers proposes to advertise Chile saltpetre on a more extensive scale than hitherto, and has requested the government to increase the annual grant for publicity from £40,000 to £100,000. At the same time it is proposed to levy from the members of the Association a sum of 2d. on every 100 kilos of nitre sold, as a contribution to the advertising fund. Should the government grant fall short of £100,000, this contribution will be increased to 2½d.

TECHNOLOGICAL EDUCATION IN INDIA.—Writing in recent issues of "The Englishman," Mr. J. C. Ghosh, principal of the School of Chemical Technology, Calcutta, points out that India is mainly an agricultural country and will never become industrial as understood in the West. He emphasises the need for scientific agriculture, and suggests that science should lead the industry instead of waiting until it is established before producing trained men. Mr. Ghosh considers it the duty of Government and public bodies, such as municipalities and district boards, to subsidise schools which are trying to train men and women on practical lines by giving them the aid of a sound technological education.

SPECIALITIES IN SPAIN.—In presenting an account of its activities to the general meeting of the National Pharmaceutical Association, held in Seville, October 16-21, the board of the Association dealt with the steps taken to conclude an agreement with the Association of Manufacturers of Pharmaceutical Specialities. From the report it appears that a provisional agreement was drawn up, of which the following were the principal points : (1) The Association of Manufacturers of Pharmaceutical Specialities and the National Pharmaceutical Association shall jointly present a petition to the Government praying that the sale of all purely medicinal preparations shall be reserved exclusively to pharmacists. (2) Pharmacists shall be granted the following discounts : 20 per cent. on invalid foods and toilet preparations; 25 per cent. on preparations not requiring a prescription the sale price of which exceeds 5 pesetas, and 27.5 per cent. on those retailing at less than 5 pesetas; 30 per cent. on those requiring a prescription and selling at 5 pesetas or more, and 33.35 per cent. on those selling at less than 5 pesetas. (3) These discounts shall not be subject to any deductions for freight, postage and packing. (4) Both Associations will join in taking steps to ensure that the published retail price of pharmaceutical specialities (which has to be printed on the label in accordance with articles 3 and 10 of the new regulations on the sale, etc., of pharmaceutical specialities, *C. & D.*, March 1, p. 314) shall be strictly adhered to, and penalties provided for non-observance of this stipulation. (5) Retail pharmacists shall in every instance give preference to national specialities over similar products of foreign origin, and similarly the National Pharmaceutical Association undertakes to safeguard the interest of Spanish manufacturers of specialities against foreign products. However, at the last moment, the managing committee of the Association of Manufacturers of Pharmaceutical Specialities declined to ratify this provisional agreement, declaring that they were unable to increase the present rates of discount, and refused to participate in any petition designed to confer a monopoly of the sale of specialities to pharmacists.

Legal Reports

Camphorated Oil Cases.—At Woolwich Police Court, London, on November 11, John Thomas Newman, Raglan Road, Plumstead, was summoned for having sold camphorated oil mixed with mineral oil and deficient in camphor. The defendant urged that at the time of the purchase the buyer was told that what she had been served with was not sold as camphorated oil, but as camphor and oil. This was denied. The public analyst had certified that the preparation was 67.85 per cent. deficient in camphor and contained 93.57 per cent. of mineral oil. The defendant was fined 40s., with 21s. costs.—At the same Court, Jane May Carter, Brambledbury Road, Plumstead, was similarly summoned for selling camphorated oil deficient in camphor to the extent of 46.7 per cent. Mr. F. H. Braund, defending, said that his client bought a card bearing a dozen small bottles of camphorated oil some months ago. They had been exposed to the sun, and he urged it as a probability that some of the camphor had escaped from each bottle by evaporation through the "porous" cork and tinfoil wrapping. The magistrate said he had noticed that the quantity of olive oil was correct in each bottle, and it might be that a certain amount of camphor had escaped by evaporation. The summons would be dismissed on payment of 10s. 6d. costs.

Defending a Word.—In the Chancery Division of the High Court, London, on November 11, Mr. Justice Tomlin decided an action brought by the Reliance Rubber Co., Ltd., Upper Thames Street, E.C., for an injunction restraining the Reliance Tyre Co., Ltd., Willesden, N.W., from using the word "Reliance" as part of its registered name. It was stated that the plaintiffs and their predecessors had used the word "Reliance" in connection with their rubber goods for thirty years, and that in the chemists' and ironmongers' trades the word had become exclusively identified with their goods. The defendant company was incorporated in 1922 with substantially the same objects, and when complaint was made refused to change its name, on the ground that "Reliance" was a common English word, and that the plaintiffs had not established a right to a monopoly of it in the rubber trade. Mr. T. S. Harrison (George's Drug Stores, Ltd., Green Street, W.C.) said he associated hot-water bottles and other rubber goods described as "Reliance" with the plaintiffs. If he heard of another rubber company with that word in its name he would think it was a branch of the plaintiffs' business. Mr. E. J. Edwards (North British Rubber Co., Ltd.) and several other witnesses gave similar evidence. His lordship said he was satisfied that in the trade generally "Reliance" meant the plaintiffs' goods. There was no *prima facie* reason why the defendants should have adopted the name, and no reason why they should not have changed it when complaint was made. Its adoption was calculated to cause confusion and deception. He granted the injunction asked for, but suspended it for six weeks in order to give the defendants time to change their name. The defendants were ordered to pay the costs of the action.

Dermatitis from "Dough" for Golf Balls.—In Bow County Court, London on November 10, Judge Hargreaves heard an application, under the Workmen's Compensation Act, by Henry Chapman, Maryland Square, E., against the India Rubber, Gutta Percha and Telegraph Works Co., Ltd., Cannon Street, E.C. In opening the case, Mr. O'Malley said that the applicant had contracted dermatitis while making gutta percha dough for golf balls at the respondents' Silvertown factory. He had been at work for them for over twenty years. At the end of last year they were using a brown dough, but changed it to a white; in this mixture there were any number of chemicals and petrol, and the fumes given off by these had apparently affected the applicant, and poisoned him. The applicant, giving evidence, said that this dough was made in 180 degrees of heat. It was rolled between steel plates, and the fumes were thrown off direct into the worker's face. A medical witness said he considered that the applicant's condition was due to his exposure to the fumes of chemicals and liquids, such as were usually associated with the making of gutta percha. He referred in particular to carbon disulphide, benzole, carbon chloride, mercury, alcohol, various acids, resins, oils, etc. He could not, of course, specifically say which of these had caused the mischief. Mr. Sandilands, for the company, said that the applicant's case must fail. Inhaling poisonous fumes from chemicals would not cause dermatitis. After an adjournment, another doctor gave evidence for the plaintiff, and in cross-examination said he did not think his condition would be caused by inhaling poisonous chemical fumes, although it was true that nervous debility was caused in a variety of unknown ways. By Judge Hargreaves: The dermatitis must have been caused by something touching the skin. After hearing medical and other evidence for the respondents, his honour said he had come to the conclusion that the applicant's condition was a direct result of this dermatitis. He should therefore enter an award in his favour for total incapacity for 30s. a week from August 25.

Dentists Register Case.—At the Central Criminal Court, London, on November 12, Jack Pinkie Newman (21), described as a dentist, pleaded "Guilty" to an indictment which charged him with procuring himself to be registered on the Dentists Register, by making a false declaration, and, with intent to defraud, forging documents purporting to be confidential reports of character from Dr. Edgar Carter and Mr. George Abbott. Mr. H. I. P. Hallett appeared for the Dental Board of the United Kingdom, and Mr. Eustace Fulton defended. Mr. Hallett stated that the defendant's real name was Jack Lemauski, and he applied to be registered from an accommodation address. The defendant stated in his application that he was born in Russia, while the truth was that Spitalfields was his birthplace, and he gave a wrong age. He enclosed a Russian birth certificate which belonged to another man named Pinkie Newman, which he borrowed for the purposes of the application. The defendant further stated that he had been engaged for five years in practical dentistry, and according to the dates which he gave he must have started when he was ten years old. References had to be furnished by two people, but the defendant only gave one, which was in the form of a sworn declaration. That sworn declaration was given by a man named Harold Light, to whom the prisoner paid 30s. for the service he rendered. Light had not been found. Subsequently the defendant was asked for further references, and they were furnished by Dr. Edgar Carter, Kentish Town Road, N., and George Abbott, Prince of Wales Road, N.W. The references were written by the accused himself. The defendant took a surgery at 136 Whitechapel Road, E., and had been practising there ever since. He succeeded in getting his name on the Dentists Register, and from time to time had renewed the registration. A police officer stated that the accused was for some time employed in the mechanical branch of dentistry, but not on the operating side. For one period of a few months he was employed by a qualified dentist. Mr. Fulton said that the defendant's action in getting himself placed on the Register could not be defended. The Act inflicted a hardship upon people who had practised dentistry at an earlier date. The Recorder said that this was a serious offence. The great profession of dentistry had to be protected, and the public who committed themselves to dentists had also to be protected. The accused would have to go to prison for twelve months in the second division.

Bankruptcy Reports

Re Alfred Norris, 107-111 Moorgate Street Chambers, London, E.C.—An application for an order of discharge was made, on November 7, to Mr. Registrar Francke at the London Bankruptcy Court. Mr. F. Vyvyan, official receiver, reported that the applicant failed in January 1923 (*C. & D.*, I, 1923, p. 110), with liabilities £5,178 and assets which had realised £6. The application was opposed by the official receiver. The registrar upheld the report, but granted a discharge, subject to judgment for £50.

New Companies
and Company News

P.C. means Private Company and R.O. Registered Office.

MITCHELL PATENT MEDICINES, LTD. (P.C.). — Capital £1,000. Objects : To carry on the business of manufacturers of and dealers in medicines and preparations, etc. R.O. :—Ethelburga House, 91 Bishopsgate, London, E.C.2.

W. J. HOLLAND, LTD. (P.C.).—Capital £5,000. Objects : To acquire the business carried on at 26 East Parade, Bradford, as W. J. Holland, and to carry on the business of drysalters, chemists, druggists, oil and colourmen, etc. R.O. :—26 East Parade, Bradford.

T. C. MILLER, LTD. (P.C.).—Capital £1,000. Objects : To carry on the businesses of chemists and druggists, dealers in patent medicines and photographic materials, tobacco and cigarettes, etc. The directors are : T. C. Miller, W. Miller, and Janet M. Miller. R.O. : 78 Queen Street, Edinburgh.

KILLARNEY PERPARATIONS, LTD. (P.C.).—Capital £1,000. Objects : To manufacture, import, export and deal in drugs, medicines, formulæ, compounds, proprietary articles, etc. The directors are :—M. A. Keily, T. Keily, F. Coultry, and G. H. Perry. R.O. : 39 Bridgefoot Street, Dublin.

OAKFIELD PHARMACY, LTD. (P.C.).—Capital £200. Objects : To acquire the business of a chemist and druggist carried on at 13 Oakfield Road, Anerley, London, S.E., and to adopt an agreement with E. Pett. The first directors are :—E. Pett and Winifred E. Pett. R.O. :—13 Oakfield Road, Anerley, London, S.E.20.

GLAND PRODUCTS CO., LTD. (P.C.).—Capital £2,000. Objects : To acquire the business of manufacturers and sellers of medical formulæ and recipes carried on by F. J. Lister, H. E. Annett and H. S. Allan, at 48 Castle Street, Liverpool, as the "Gland Products Company." The directors are :—F. J. Lister, Dr. H. E. Annett and H. S. Allan. R.O. :—48 Castle Street, Liverpool.

BANÔNA, LTD. (P.C.).—Capital £10,000. Objects : To manufacture or contract for the manufacture of a patent food to be compounded according to a formula invented by Obe Millsum; and to carry on the business of manufacturers of and dealers in foods and feeding stuffs, etc. The directors are : O. Millsum, F. La Trobe, W. A. Summerton, E. T. Fasham, and W. R. Noble. R.O. : 185 Northdown Road, Cliftonville, Margate.

W. A. GEERE & CO., LTD. (P.C.).—Capital £1,000. Objects : To acquire from W. A. Geere and E. W. Geere the benefit of certain existing inventions relating to malt flour and yeast preparations, and to carry on the business of manufacturers and sellers of malt flour and yeast preparations, food, chemical and medical preparations. The directors are : E. W. Geere and W. A. Geere. Solicitor : J. Roberts, 8 Ely Place, London, E.C.

OLEUM OILS, LTD. (P.C.).—Capital £5,000. Objects ; To carry on the business of manufacturers of oils, soap and margarine, dealers in oils and oleaginous and saponaceous substances, chemists and druggists, manufacturers of and dealers in toilet requisites and boxes and cases wholly of card, wood, metal or otherwise, etc. The directors are : A. T. Laing, Lt.-Col. C. F. T. Murray, and J. B. Linn. Solicitors : Braund & Hill, 6 Gray's Inn Square, London, W.C.1.

BRITISH POTASH INDUSTRIES, LTD.—Capital £25,000. Objects : To adopt an agreement with A. H. Berlandina, to acquire and work any mines, quarries, coal or other minerals or mining, quarrying or colliery rights in England or elsewhere; and to carry on the business of manufacturers of chemicals and manures, chemists, druggists, distillers, gas and dye makers, colourmen, metallurgists, etc. The directors are : Lord Askwith, Lt.-Col. Sir Alfred C. E. Welby, A. H. Berlandina, and G. H. Jones. R.O. : 4 London Wall Buildings, Blomfield Street, London, E.C.

Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

Monday, November 17

Pharmaceutical Society of Great Britain (Oxford Branch), Magistrates' Room, Town Hall, at 8 p.m. "The Story of a Glass of Milk," by Mr. W. J. Melhuish.

Society of Chemical Industry (London Section), Engineers' Club, Coventry Street, Piccadilly, W., at 8 p.m. Joint meeting with Institution of the Rubber Industry. Dr. A. Van Rossem on "Latex." Dinner before the meeting (5s. each).

Tuesday, November 18

North London Pharmaceutical Association, North Library, Manor Gardens, Holloway Road, at 8.30 p.m. Mr. A. E. Young, Leicester, on "The Need of Business Training." Assistants and managers welcomed.

Retail Pharmacists' Union (Hull Branch), Gowling's Restaurant. Address by Mr. Gilligan.

Glasgow Pharmacy Club (Rambling Section).—Visit to Royal Infirmary. Meet at north side of Cathedral Square.

Wednesday, November 19

Hull Chemists' Association, Beverley Road Baths. Annual carnival ball.

Pharmaceutical Society of Great Britain.—BRANCH MEETINGS. *Bolton*, Empress Rooms, Mealhouse Lane, at 3 p.m. Dr. Paget Moffatt on "Heliotherapy." *Bournemouth*, Gervis Hall, at 6.30 p.m. Whist drive. *Manchester*, Milton Hall, Deansgate, at 3.30 p.m. Mr. F. Browne on the "B.P. Codex." *Portsmouth*, Goodies Café, at 6.45 p.m. Whist drive and dance. Tickets (3s. each) from W. H. Bown, 50 Victoria Road N.

Thursday, November 20

London (North-East) Pharmaceutical Association, St. John's Institute, Urswick Road, Hackney, at 3 p.m. Mr. J. Keall on "Insurance."

Friday, November 21

Pharmaceutical Society of Great Britain, 36 York Place, at 8 p.m. Inaugural address on "How Disease is Interpreted from Pathological Observations" (with lantern illustrations), by J. Lorrain Smith, F.R.S., Dean of the Faculty of Medicine, Edinburgh University.

Brighton and Hove Association of Pharmacy.—The annual dinner will be held in the Royal Pavilion, Brighton, on November 28, at 7.30 p.m Mr. F. Pilkington Sargeant, President of the Pharmaceutical Society, will be a guest of the Association. Tickets, 10s. 6d. each (evening dress optional), from Mr. F. W. Burgess, 138 Preston Drove, Brighton.

LONDON (WESTERN) PHARMACISTS' ASSOCIATION.—The annual dinner will be held at the Restaurant Frascati, Oxford Street, W., on November 26. Reception, 6.30 p.m.; dinner, 7 p.m. Evening dress. Ladies specially invited. Tickets (12s. 6d. each) from Mr. W. B. Falding, 5 Sussex Place, South Kensington, S.W.7; Mr. C. G. Bonner, 20 New Street, Dorset Square, N.W.1; and Mr. T. Morley Taylor, 270 West End Lane, N.W.6; or any member of the Committee.

Recent Patents

Abstracts of specifications of recently-granted patents for inventions. The complete specification (1s. each including postage) of British patents can be obtained from the Patent Office, 25 Southampton Buildings, London, W.C.2, on quoting the name of the patentee and the number of the patent.

GERMANY

Methylarsinic Acid.—A process for the preparation of methylarsinic acid, consisting in adding dimethyl sulphate to a solution of arsenious oxide in caustic soda. (R. Lesser and G. Gad. D.R.P. 404,589.)

Ampoule Opener.—A device provided with an opening into which the tubular end of the ampoule is inserted and in which a glass-cutter is fixed. On revolving the ampoule, a cut round the neck is made, and the latter can be cleanly broken off. (A. Kunz. D.R.P. 405,078.)

Lithium Naphthenate.—A method for the preparation of a salt of lithium which is readily absorbed by the skin, consisting in adding a suspension of lithium carbonate to a solution of naphthenic acid; the resulting lithium naphthenate occurs as an unctuous mass, miscible with oils and fats. (Chlorit Chemische Fabrik A.G. D.R.P. 404,697.)

Spanish Olive Oil Industry

THE announcement that the seventh international olive oil congress will be held in Seville from December 5 to 10 (*C. & D.*, October 18, p. 556), draws attention to the fact that Spain is the largest producer of olive oil in the world, although the area devoted to the cultivation of the olive is not so large as in Italy, which comes second as regards output of oil. The total area under cultivation in Spain is about 3,950,000 acres, the yield of oil, and the amounts exported, during the past years being as follows :—

	Production Tons	Exports Tons
1918-1919	356,000	88,000
1919-1920	340,000	141,000
1920-1921	320,000	64,000
1921-1922	270,000	35,000

In 1923, 57,000 tons were exported, chiefly to South America, Italy and Great Britain. The total yield of the last crop is estimated to amount at the outside to 280,000 tons. Prior to the introduction of the export tax on olive oil, the average price for ordinary commercial grades was 152 pesetas for 100 kilos, but this advanced successively to 217 pesetas, then fell to 190 pesetas, which the olive cultivators now regard as the minimum price at which they are prepared to sell, compared with 130 pesetas in 1920. It is in the Southern provinces of Spain, in the region known as Andalusia, that the cultivation of the olive and the production of olive oil form the staple industry of the country. In fact, the economic situation is dominated by the olive industry, wine taking a second place, and there is not a town or a village, however small, that does not possess its own oil mills. Many of these mills are owned and worked by the growers themselves, by the same primitive methods as followed by their forefathers for generations. A few, however, are equipped with modern machinery, and the extraction of the oil in these is conducted on rational lines, with a view to obtaining the highest possible yield. Whatever the equipment of the establishment, the initial procedure is the same. The olives, including the stones, are ground by means of two heavy conical stone rollers, and the resulting pulp is submitted to three pressings. The oil obtained in the first pressing is usually employed as such for culinary purposes, while that from the second and third pressings, with a high content of fatty acids, is largely sold to oil refineries for further treatment. Of refineries with modern plant Spain possesses about twenty, and in these treatment consists, in the first place, in neutralising the oil. The method generally adopted is to treat the oil with caustic soda in a large mixer, at a temperature of 50° to 60° C., whereupon the soap which separates out is removed and sold to soap works. This process involves, however, an appreciable loss, since the soap film retains as much as 50 per cent. of olive oil, and does not fetch as much as the oil itself. The next step consists in decolorising the oil, usually by means of bone black, and, finally, to remove the odour, superheated steam is blown through the oil in a vacuum apparatus. The residue which remains after the third pressing, locally known as "orujo," still contains about 7 to 15 per cent. of oil, with 20 to 40 per cent. of moisture. The utilisation of this residue for the purpose of extracting the oil it still contains has given birth to a new local industry which is steadily gaining in importance, and in many respects resembles a similar procedure widely adopted in Italy. In the "Chemiker-Zeitung" of October 14 and 28, director J. Bohle, who is in charge of an oil-refining plant in Cordoba, deals exhaustively with this development of the olive oil industry. Special establishments have been created, in which this "orujo" is extracted with carbon disulphide, yielding on an average 10 per cent. of oil. The residue, after extraction, is used as fuel. Extraction is carried out in large iron drums, capable of holding 5 or 10 tons of "orujo," to which an equal amount of carbon disulphide is added. Two extractors are worked together; after a period of maceration lasting two to three hours, the liquid is drawn off and transferred to the second extractor, an operation which is usually repeated four times. Thus, to extract 10 tons of "orujo" approximately 40 tons of carbon disulphide is required. The latter is submitted to distillation in four successive portions of 10 tons each, the first portion yielding about 700 kilos, the second 170, the third 80, and the fourth portion about 50 kilos of oil. The oil thus obtained contains from 5 to 70 per cent. of fatty acids; oil with a content of fatty acids not exceeding 25 per cent. is neutralised, decolorised and sold, or exported, chiefly for use as a lubricant, while the oil with a higher content of fatty acids is used for the manufacture of soap. It is interesting to note that the oil extracted by means of carbon disulphide always contains a varying amount of palmitin and stearin, and on storing, particularly in a cool place, this mixture crystallises out and causes the oil to appear cloudy. In the refinery at Aguilar 20 tons of soap is produced daily from extracted oil. In the refinery in Cordoba, of which Herr Bohle is technical manager, 20 tons of finest olive oil is produced daily, in addition to extracting 240 tons of "orujo," with the result that over a period of seven to eight months 3,500 tons of oil, extracted by carbon disulphide, is obtained. In addition, about 5,000 tons of soap is manufactured annually. The necessary carbon disulphide is produced on the spot, the production amounting to 750 tons. However, the production of olive oil in Spain, according to Herr Bohle, is capable of considerable expansion, provided the present antiquated methods are abandoned, new processes adopted and modern machinery installed to take the place of the primitive oil mills and obsolete equipment at present in use. In this connection it may be mentioned that of late the question of developing the olive oil industry has been very much to the fore in Spain, and there is a conflict of interests between the producers, dealers and exporters on the one hand, and the consumers on the other. There is an agitation on foot to obtain the repeal of the export tax on olive oil, but so far the Government has refused to accede to this demand, pending the results of an inquiry on the fluctuations in prices on the home and foreign markets, and the amounts of oil exported.

Wills

Mr. John Bridge Davies, chemist and druggist, High Street, Bromyard, who died on June 6, left estate of the gross value of 3,914 17s. 4d., with net personalty £1,829 1s. 11d.

Mr. Edward Whineray, chemist and druggist, 7 Etloe Terrace, Church Road, Leyton, who died on September 26, left estate of the gross value of £2,153 1s. 9d., with net personalty £1,988 18s. 5d.

MR. HENRY SCOTT HOGG, chemist and druggist, 13 Queen Street, Ulverston, who died on January 18, left estate of the gross value of £1,854 4s. 2d., of which £435 9s. 1d. is net personalty. Administration of the property has been granted to his son, Henry Scott Hogg, chemist's manager.

Mr. George Wylie Alexander, surgical instrument maker, 43 Heathfield Road, Wavertree, Liverpool, of Alexander & Fowler, Pembroke Place, who died on July 11, left property so far as can at present be ascertained of the gross value of £1,534 13s. 6d., with net personalty £721 9s.

MR. HORACE WALFORD MACORD, chemist, 120 East India Dock Road, Poplar, E., who died on September 4, aged seventy-seven years, left estate of the gross value of £850, with net personalty £531 11s. 6d. Probate of the will has been granted to his daughter, Mrs. Maud Alice Warren.

MR. JOHN ALLEN, Oak Hall, Mardon Ash, Ongar, chairman of Frederick Allen & Sons (Poplar), Ltd., chemical manufacturers, who died on August 30, left £15,389 3s. 9d. The testator gives £2,000 to his son Walter Francis, £500 to his daughter-in-law, Mary Meek, £500 to his sister-in-law, Sarah G. Francis, £100 to George Bellinger, clerk, and the residue of his property to his son Frederick John.

Pharmaceutical Society
of Great Britain

Evening Meeting in London

The opening evening meeting of the winter session was held at 17 Bloomsbury Square, London, W.C., on November 11. The President (Mr. Pilkington Sargeant), who occupied the chair, was supported by Sir William Glyn-Jones and Mr. Edmund White. Mr. Sargeant, in welcoming a large audience, promised a very successful session, having regard to the interest of the subjects and the eminence of the lecturers. He then called upon Mr. J. E. Purvis, M.A., F.I.C., Cambridge University—and a member of the Board of Examiners of the Pharmaceutical Society, to give an address on

Spectroscopy

[ABSTRACT.]

Mr. Purvis introduced his subject with a brief historical account. The history of spectroscopy, he stated, began like that of so many others, with Newton's discovery of colours about the year 1670. This discovery lay in abeyance for 100 years, when use was made of the prismatic spectrum to study the stars. Later spectroscopy became prominent in the discovery of new elements, Sir Wm. Crookes by this means discovering one or two new bodies. In discussing the nature of the spectrum Mr. Purvis recalled that the spectrum includes the invisible regions—the infra-red and the ultra-violet regions—and investigations have shown that there is no break in the continuity of the vibrations, that is to say, if they are vibrations at all which, according to the latest theory, is open to doubt. The causation of the spectrum was then briefly touched upon. Mr. Purvis proceeded to a consideration of the method of determining the nature of a particular element. If an element be taken, and well heated, it gives a certain definite ray or rays which will be constant for the same element, no matter from what part of the world it has been obtained. The value of the spectroscope in distinguishing between two elements, which are atomically closely allied, was then touched upon. For example, nickel and cobalt are shown by photographing the ultra-violet field to be completely different. This is important, because it means that two elements with a small difference in the atomic weight may show a marked difference in regard to radiation. While the vibratory system of a substance does not alter, Mr. Purvis pointed out that abnormal conditions may modify it. For example, if immense pressure is imposed on these spectral lines a "shift" is obtained whereby the position is altered, but not the appearance. If the vibratory system is placed in a very powerful electro-magnetic field the lines of the spectrum may be split up into as many as six, eight, or ten vibratory lines, which immediately revert to the normal condition when the electric field is cut off. Spectroscopy is, of course, not confined merely to an examination of solids. Gases through which an electric discharge is passed show a well-marked series of lines. Argon and neon in an electric field show the break up of the spectrum lines into three constituents, these being known as "triplets." Every element has its own particular spectral line, which alters very considerably, according to the conditions which surround the vibratory system. Mr. Purvis then proceeded to a consideration of spectroscopy in regard to the constitution of matter, particularly of organic compounds, a systematic examination of which has been carried out in America. These substances are studied in thin films of liquids, or in solution (alcohol), or in the gaseous state. In the last-named condition care is essential to prevent decomposition. An example was shown on the screen of benzene and toluene, two closely allied substances. Ultra-violet rays passed through a thin film of these substances show unmistakable differences. If molecular quantities of the substances are dissolved in alcohol and again observed the phenomena are exactly the same except that they differ in intensity and position. Examined in the state of vapour, it was shown by means of a lantern slide that the bands disappear, each band being divided into ten, twelve, or thirteen very fine bands indeed. The lecturer explained this difference by pointing out that alcohol interfered with the vibrations by crushing them together. Lantern slides of the spectra of many organic compounds were then discussed. It was shown, for example, that the absorptive capacity of phenol is very different from that of benzene, due to the substitution of an OH group for a hydrogen atom. The absorptive capacity, therefore, is bound to be altered by the introduction of a different radicle. All unsaturated organic compounds give an absorptive band somewhere in the spectrum, while saturated compounds give no absorptive band beyond a certain region. Passing to a consideration of spectroscopy in regard to drugs, Mr. Purvis made brief allusion to the pioneer work of Hartley in this connection about 1870. He was the first to study alkaloids holding that the constitution of all substances could be investigated through their absorptive capacity. Slides of Hartley's investigations on quinine and cinchonine were shown, the lecturer pointing out that by spectroscopic examination the presence of any impurity can be detected without the slightest difficulty. That is, provided the constituents of the solution do not interact chemically. In conclusion, the speaker said spectroscopy is of immense value from a practical point of view. Impurities can be detected in a vibratory system of a solid, or in solution. It has been extremely useful in research work in regard to the internal vibration of the atom and molecule. It is invaluable in astronomy, and was used as a means of determining the accuracy of Einstein's theory. There was no discussion. The President proposed a vote of thanks, Mr. Purvis replying.

Branch Meetings

Manchester.—A meeting of the Manchester and Salford Branch was held in the Milton Hall, Deansgate, on November 5. Mr. Wm. Kirkby, M.Sc., chairman (president), said he hoped that the junior section of the members would take more interest in the welfare of the Branch and its activities, now that they were offering them greater facilities and helping them to form their own committee. During the evening the following were proposed and elected to form the Provisional Committee: Misses Findlow and Roberts, Messrs. Badrock, Barker, Collins, Hough, Lawton and Waite. The chairman congratulated Mr. R. G. Edwards, the President of the Manchester Pharmaceutical Association, on his election as a city councillor. Mr. Edwards afterwards presented the prizes for the Essay competition to the successful candidates. He regretted that the papers sent in for the Essay competition were not of a very high standard, and he thought the Pharmaceutical Society had not done the wisest of things when they left Latin optional. The inclusion of Latin and the classics in the education of a scholar was often productive of a more thorough finish to the scholar's abilities. An enjoyable concert was afterwards provided by the following artistes: Miss D. Franklin (accompanist), Mrs. Pipkin, Miss Minshull, Messrs. Chapman, Kay and Hough. A vote of thanks to the artistes was proposed by Mr. E. H. Simmons.

Business Changes

MISS D. M. WATSON, chemist and druggist, has commenced business at 76 High Street, Lowestoft.

MR. W. COWEN, chemist and druggist, has commenced business at Keswick.

TAYLORS' DRUG CO., LTD., have taken over the business of John Day & Sons, chemists, 77 Carlisle Road, Bradford.

MR. R. G. S. DALKIN, chemist and druggist, 41 Wellgate, Rotherham, has opened a branch business at Wickersley.

MR. F. RICHARDSON, late of Plas Eidal, Llandudno, has purchased the business of Mr. S. Hutchinson, 60-62 Keighley Road, Cowling.

TEN YEARS OF THE SOCIETY'S HISTORY, 1913-1923

Abstract of an address by Sir William Glyn-Jones, Secretary of the Pharmaceutical Society of Great Britain, delivered before the West Metropolitan Branch of the Society, November 5, 1924.

ANOTHER way of stating my subject would be to say: "The Society during the War and its Aftermath." Although the ten years under review may not loom as large in the history of the Society as they must do in the lives of the men and women of this generation, that it has been a momentous decade in the history of the Society cannot be denied. The outbreak of the Great War came as a shock for which pharmacy and pharmacists—like every other section of the community—were unprepared. Parliament was forced by abnormal circumstances to legislate for, and regulate, almost every detail of the work of the pharmacist. Government Departments—many specially created for the purpose—with improvised, well-meaning but ill-equipped staffs administered both the provisions of hurried Acts of Parliament and the more numerous regulations which Parliament, in too great a hurry to make, empowered the Departments to make. I think it was fortunate that through the whole period of the war and reconstruction there were in the House of Commons itself spokesmen for the Society, men who, let it be remembered, would not have been there but for the Society. The Parliamentary reports bear evidence to the immense service the Society rendered, not only to the State, but to its own members, by having ensured through the presence in the House itself of a representative the avoidance of irretrievable legislative blunders. There was scarcely a single Bill of the many affecting pharmacy, the original proposals of which were not materially altered for good by the direct intervention, either in debate or otherwise, of the Society's recognised spokesmen in the House. There is scarcely one of the great Departments of State that has not formerly or unofficially written to acknowledge the unique services rendered to them by the Society. The secretary and Parliamentary secretary were both appointed to important positions in Government Departments, and in consequence a relationship and understanding between those particular Departments and the Society was established which would not otherwise have been possible. The Presidents and their colleagues, including co-opted members of various Committees of the Council, spent much of their time in the offices of the Departments at interviews or as members of special Government Committees, and the rank and file of pharmacists will probably never be able fully to appreciate the value to them of the war and post-war work of the Society. Those services would have been impossible in the absence of a strong, well-equipped, and loyally supported national organisation, such as, I submit, the Society proved itself to be.

THE SOCIETY'S ACTIVITIES

The Society's activities during the war can be divided into those concerned with (1) the proper allocation of pharmacists and their assistants as between the country's need for them for service with the Colours and the necessity for maintaining the essential pharmaceutical services connected with the supply and distribution of drugs and medicines not only for the Forces, but for the civil community; and (2) the provision of supplies of the material needed for pharmaceutical purposes and the conservation and distribution of such supplies. It had, further, the duty to those who had left pharmacy for the time being to serve with the fighting Forces, to minimise so far as possible the inevitable sacrifices which such service entailed. The Society was consulted as a national organisation by the authorities at Whitehall in the preparation of the scheme of national service as it affected pharmacists. A national register was formulated and official guidance given to the authorities which curtailed the haphazard depletion of the ranks of pharmacy, and as a consequence pharmacists were placed in the list of reserved occupations. The general lines on which pharmacists and their assistants were selected for active service were laid down after consultation with the Society. These were worked out in the various localities, and the local Pharmaceutical Committees, through their officers, were given functions involving great responsibility and enormous labours, and it was due to these combined efforts that the dislocation of the business of pharmacy was not infinitely greater than in fact was the case. I can only mention the intervention of the Society in the matter of the pharmaceutical service in the Army. There has been a long series of investigations at home and at the front, numerous deputations, two important committees, the last appointed by the Army Council. The report of that committee, thanks to the Society, has at last been published. The Society is now taking action to secure the adoption of the reforms unanimously recommended in the report. May I remind you of the Society's actions in connection with the panic rise in prices, and of the work of the Advisory Committee, which enabled prices to be stabilised and controlled; the War Emergency Formulary and War Emergency Notes; the conservation of glycerin, sugar, etc., the important researches in connection with which the Society's laboratories and staff were placed at the disposal of the War Office and other Government Departments; the organised assistance to Belgian doctors and pharmacists. Where would the pharmaceutical service under the Insurance Act have been but for the activities of the L.A.E., which was an integral part of the Society's organisation? You will remember the Departmental Committee of Inquiry into N.H.I. tariff in 1915, the discounting of your accounts, the *ex-gratia* payments of £60,000, and the subsequent increases of £54,000, £50,000 and £55,000. Through parliamentary action the Society secured the rebate of the advanced spirit duties. The Society undertook the enormously difficult task of ascertaining who had left the ranks of pharmacy for service with the Colours, and of finding out the units in which they were serving. They met with a great measure of success. The result enabled the Society to respond to a call for assistance by the Government in organising, so far as it was possible, Army schools for technical instruction, and in connection with these and other efforts to assist boys at the front to select and train for a vocation. Major Peck and Mr. Gamble, the nominees of the Society, were sent by the War Office to the various seats of war to help in this connection.

POST-WAR WORK

Again, on the signing of the Armistice, the Society was responsible for expediting demobilisation and for securing the return to civil life of some thousands of pharmacists and their assistants who, but for such organised efforts, would have remained with the Colours for a much longer period. The War Auxiliary Benevolent Fund was founded in August 1918 for the purpose of dealing with cases of hardship among ex-Service men which could not be dealt with by the statutory Benevolent Fund. A total of £23,112 was collected, and the administration of the amount was placed by the Council in the hands of the Benevolent Fund Committee. Over 1,500 cases have been dealt with, and a total of over £11,000 has been expended in relief—mostly in supplementing the Government training grant or in providing training facilities for those who were too late to obtain grants. The Fund was registered under the War Charities Act, and is still on the register, there being each month applications for assistance. With a view to placing the Fund upon a permanent basis, application was made on behalf of the Council to the Charity Commission for approval of a scheme extending the objects of the charity to the education and training of the sons or daughters or dependants of those who served in the Army, and to give assistance to ex-Service men or their dependants, notwithstanding that their need for such assistance is not directly attributable to the war. On February 5, 1924, the approval of the scheme was sealed by the Commission. Side by side with the administration of the W.A.B.F. the work of the Benevolent Fund has gone on. First there was a scheme for assisting those who, through disablement, were unable to take up again their own calling, but who would be capable of earning a living by some fresh trade, business, or profession for which

their particular disability would not unfit them. The Government undertook to train them, and the Society was asked to assist. The National Trade Advisory Committee was formed and functioned, though few disabled men, fit and wishing to take up pharmacy, were forthcoming. Then came the much bigger problem, that of the hundreds of thousands of young men who when war broke out were either on the threshold of training for a vocation or whose training or studies had started, but had to be abandoned while they fought for us. The country rightly decided as far as possible to reduce the handicap caused by that break in their career at so vital a stage. The Departments started treating the aspirants for a pharmaceutical qualification as budding shopkeepers under the Interrupted Apprenticeship Scheme. The public, and even the members of the Society and the men concerned, know nothing of the struggle which at that time went on behind the scenes to secure for our apprentices and assistants the status and treatment of those training for a profession or whose higher or University education had been interrupted. Then there was the task entrusted by the Government to the Society of allocating the thousands of grantees to suitable pharmacy schools. Through the Society, educational authorities were induced to equip and staff new schools, and accommodation for 1,069 students was found. For those who of necessity had to wait their turn for admission, the preparatory course scheme and its prizes were instituted by the Council In 1908 the Poisons and Pharmacy Act gave the Society power by by-laws to require students for the Qualifying examination to undergo practical training and to impose definite periods of college training. It was not until 1920 that it was found possible to make these by-laws.

A Division of Function

Perhaps one of the most fundamental and lasting effects of the war arose from what now appears to have been a transitory phase. The whole country was engrossed in the questions of the relationships between employers and employed. All branches of industry were engaged in setting up machinery, Whitley Councils, Joint Negotiating Committees, and Trade Boards for dealing with these questions. Rightly or wrongly, the Society tried to meet this demand on the part of pharmacists and their assistants. The test case decided that such functions were *ultra vires* the Charter and Pharmacy Acts. The Council decided that pharmacy ought not to suffer by the limitations of the Society's powers. There was no valid argument, even if they had sought one, for making it difficult for master as well as assistant pharmacists to organise on trade-union lines. They could not have prevented the establishment of an independent, and perhaps rival, organisation for the purpose. In fact, there was already in existence an organisation, the C.D.A., powerful by reason of its numbers and resources, which would not have stood aside and allowed the creation of a third national organisation of pharmacists. So far from adopting any dog-in-the-manger attitude, the Council took the initiative in the negotiations which led to the creation of the tripartite organisation of the P.A.T.A., C.D.A., and R.P.U. The respective activities of the old Society and the new body were mutually agreed upon on more or less well-defined lines. Confusion of functions, overlapping activities, divided counsels were avoided, and instead of rival organisations competing with each other for kudos, two powerful allies, each responsible for their sphere of work, are now working side by side, and between them are covering every need of the pharmacist, whatever may be his sphere, which can be met by national organisation. The division of labour based on the principle of specialisation has rendered possible a great advance both in the essential and fundamental chartered objects of the Society. Never, taking the whole field of legitimate nationally organised effort, has pharmacy been so well served as it now is. To the credit of this era belongs the establishment of the Society branch organisation. There are 114 branches, and every member of the Society, whether he likes it or not, is a member of one or other of those branches. Every member is made conscious of his membership, and pharmacists who are not members will feel more and more out of place. The Society will be recognised by all more as a living force and less as a paper organisation. Time has been found for the revision of the Codex. Incidentally, it has produced a profit of between £3,000 and £4,000, which the Council, instead of merging in its general funds, has set aside for purposes of research and systematic work in the preparation of future editions. A comparison of the objects of the old British Pharmaceutical Conference with those of the Society Charter would have made it difficult to account for the existence of two such separate organisations. From its inception the Conference has done the very work which it was part of the Society's duty to attempt, but which, for reasons, some good and some bad, the Society has not satisfactorily tackled. The shedding of part of its functions by the Society to the R.P.U. left it free to repair its former omission in this direction.

International Pharmacy

In the realm of international pharmacy the position of the Society and of British pharmacy has vastly improved. Direct representatives of the Society are members of the executive of the International Pharmaceutical Federation, and in its inner counsels. The holding of the International meeting in 1923 in connection with our own Conference meetings in London did much to destroy our isolation in international pharmaceutical politics. There is still more to be done in this connection, and a marked advance has just been made. In 1902 an official Government International Conference was held in Brussels. The British Government were represented by the chairman of the General Medical Council and a representative of India. The Pharmaceutical Society was ignored. Last year the International Pharmaceutical Conference wrote to the Society asking the Council to urge the British Government to be officially represented at a similar Conference called at the instance of the Belgian Government, and to be held in Brussels in 1925. The Council did so, and this claim has at last been admitted.

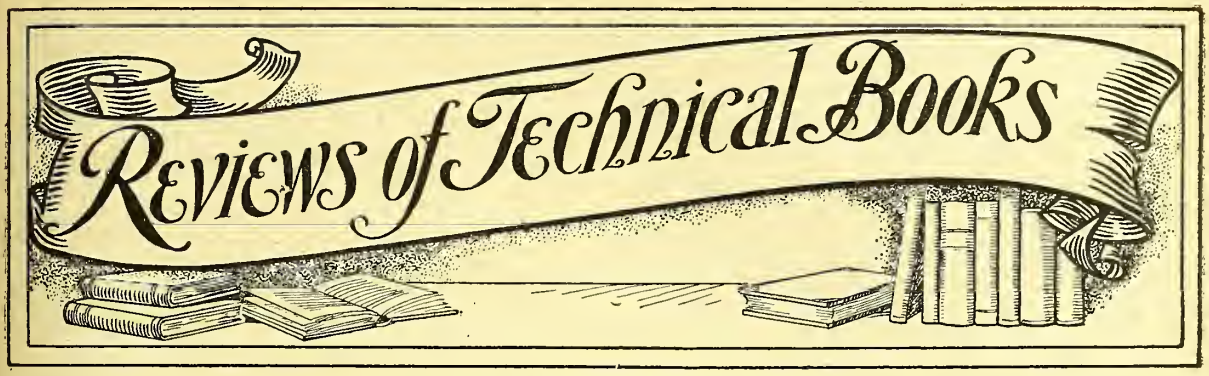
Statistics

During all these activities the Society's administration of the Pharmacy Act went steadily on. During the ten years over 20,000 inspections were made; 1,675 prosecutions were taken. The cost of the work, after allowing for the penalties recovered, amounted to over £5,000. I am sure that the public do not appreciate the value to them of this part of the Society's work, but what is more surprising is that its importance is not more fully recognised by the pharmacists.

	1913	1918	1923
Subscribers	7,099	8,778	10,519
Life	689	855	1,035
Total	7,788	9,633	11,554

	1913 £	1918 £	Compared with 1913 Per cent.	1923 £	Compared with 1913 Per cent.
Income	18,341	14,826	−19.16	41,796	+127.88
Expenditure ...	16,703	17,491	+ 4.71	35,430	+112.11
Accumulated Funds	39,843	36,354	− 8.76	72,378	+ 81.63
Interest	583	695	+19.2	2,025	+247.3

I do not say that, in the light of subsequent events, there are not other things which the Society might have done, or that some of the things it did might have been left undone or better done, but, taken as a whole, it cannot be denied that the record is a creditable one. To the members of the Society living through the momentous years of the war and its aftermath were entrusted the traditions, prestige, and honour of our old Society. The founders and their intervening successors left us a heritage we could have squandered or improved. May we hope that the future historian will say of us that, when the time came for us to retire, we handed the old flag of pharmacy to our successors, not only unsullied, but with further victories emblazoned upon it, and thus had added to its glory and enhanced its value as a great incentive to those who are to follow.



The Book of Receipts, containing a Veterinary Materia Medica, a Pharmaceutical Formulary and a Photographic Formulary. By E. W. Lucas and H. B. Stevens. 12th edition. 7½ x 4¾ in. Pp. 473. 10s. 6d. London: J. & A. Churchill, 7 Great Marlborough Street, W.1.

The last edition was published in 1907 having been reconstructed by Mr. E. W. Lucas, the new edition, in which Mr. H. B. Stevens participates, has been reset in rather larger type and is generally improved. Introductory paragraphs have been added to the sections. New recipes are added dealing with ice creams, water ices and confectionery, and the photographic formulary has been revised in accordance with present-day practice. A section has been added dealing with the statutory restrictions on the sale of poisons. The summary of the Dangerous Drugs Acts and Regulations has been reprinted from the *C. & D.* Poisons Card (No. 4) without permission and without acknowledgment.

Allen's Commercial Analysis; A Treatise on the Properties, Modes of Analysis, and Proximate Analytical Examination of the Various Organic Chemicals and Products Employed in the Arts, Manufactures, Medicine, etc. Vol. II. By S. S. Sadtler, E. C. Lathrop and C. A. Mitchell and contributors. Fifth edition. 9½ x 6 in. Pp. 807. 30s. London: J. & A. Churchill, 7 Great Marlborough Street, W.1.

As we explained when reviewing the new edition of Volume I (*C. & D.*, February 16, p. 224), the work is now carried out by English and American chemists, who deal with the subjects of which they have expert knowledge, the three editors mentioned being responsible for certain parts of the work and for the general consistency of the whole. Volume II covers the same field as the same volume of the previous edition—the analysis of fixed oils and fats, soaps and glycerin, and an additional section is on the sterol alcohols by Mr. J. A. Gardner, The volume contains about 300 pages more than the previous edition, which gives an idea of the greater detail in describing tests, an important matter, making for greater uniformity in the results obtained by different analysts. Analytical methods for almond oil, castor oil, cod-liver oil, cacao butter, beeswax, linseed oil and glycerin make this volume particularly interesting to pharmaceutical analysts.

Photographisches Praktikum. By L. David, 9½ in. by 6½ in. Pp. 588. Gold marks 9.80. Halle (Saale): Verlag von Wilhelm Knapp.

This work, by the pen of a retired General, takes first place among the German text-books on photography. The scientific foundations on which this art is based are presented in a lucid form, but without any attempt to explain physical and chemical phenomena in a popular style, the aim of the volume is to cover the whole field of photography from the point of view of its practical application; the value of the work is enhanced by the fact that it embodies the actual experiences of the author and of a number of authorities who have collaborated with him in the production of this book. The various photographic processes, both old and new, are critically described and discussed; for instance, the bromoil process and colour photography are dealt with in detail, and the large selection of formulas included render it a valuable work of reference. The numerous tables, as well as the 291 illustrations, add to its usefulness, and those possessing a knowledge of the German language will consult it with profit and interest, although, naturally, it deals almost exclusively with apparatus and products of German manufacture, a point, however, which does not impair its general usefulness. Included are reproductions of letters by Niépce, Daguerre, and Fox Talbot.

The Outdoor Sales Force. By P. E. Wilson. 7¼ in. by 4¾ in. Pp. 137. 3s. 6d. London: Sir Isaac Pitman & Sons, Ltd., Parker Street, Kingsway, W.C.2.

The efficient organisation of the section of a manufacturer's business dealing with sales is the foundation of success, while to the wholesale distributor it is not less essential. The old-time faith in the quality of one's goods being sufficient to effect sales and successive repeat orders has passed away. Nowadays it is the continuous development of organisation of advertising and effective outdoor selling force which calls for thought and action. The author of this book draws a sharp line between mail order and retail selling, and confines himself to the department covering travellers, outdoor representatives and agents. Travellers give the personal touch between an enterprise and customers, a power which the author says rightly should not be overlooked. In dealing with the human factor, he points out the necessity of having a definite house policy and the need for maintaining sympathetic contact between the sales manager and his agents. He sets out, in forms and diagrams, methods of arranging details and recording results. The organisation of the office is a vital factor to any outdoor salesman, and the author devotes several pages to its consideration and to reinforcement of the salesman's work. The analysis and compilation of statistics, as well as the purpose of house-organs, are considered. This is a book which, though small, deals efficiently with the details of outdoor sales.

Nascent Oxygen, or The Secret of Rickets and the White Plague. By Henry E. Jones. 7½ in. by 4⅞ in. Pp. 96. 3s. 6d. net. Glasgow: John Smith & Son (Glasgow), Ltd., 57-61 St. Vincent Street.

It is difficult to understand the why and wherefore of this book, which consists of schoolboy chemistry linked to mediæval medicine. The theme concerns "nascent oxygen," which is given off by ozone and hydrogen peroxide, and which is apparently a cure-all for every imaginable complaint and condition in nature. It is inconceivable that anyone could write nowadays such rubbish as: "In the pages which follow I have endeavoured to point out: That oxidising agents cause heat. That heat causes expansion of gas. That expansion of gas causes living cells to grow and dead cells to burst and disintegrate." "If hydrogen peroxide were taken into the blood vessels it would produce heat;

Reviews of Technical Books

it would give off gas, decompose and break down blood corpuscles and set free many granules, which would float on the blood stream as 'blood-dust.' Rheumatism, eczema and epilepsy are indicated in consequence. Rickets results if supply of oxygen to the cartilage is deficient." Emphasis is laid upon cooked food and boiled water as cause of tuberculosis, because germicidal oxygen is absent. Dogma and probability prevail, any suggestion of reasoned statement being absent. The book shows the extent to which a monomania can be carried, but why or for whom it is published only the author can tell, and it is full of fallacies obvious to anyone with even a smattering of science, and misleading to such individuals credulous enough to read through its pages.

A Systematic Handbook of Volumetric Analysis or the Quantitative Determination of Chemical Substances by Measure, Applied to Liquids, Solids and Gases. By Francis Sutton. Eleventh edition revised by W. Lincolne Sutton and Alfred E. Johnson. 8¾ x 5½ in. Pp. 629. 35s. London: J. & A. Churchill, 7 Great Marlborough Street, W.1.

Volumetric analysis is especially interesting to chemists and druggists, as it is so largely employed in testing the quality of chemicals used in the pharmacy and has a convenience which is not equalled by any other system of analysis. Sutton's book is therefore sure of a welcome from pharmacists. The late Mr. Francis Sutton brought out the first edition of 1863 and signed the preface of the tenth edition in 1911, when eighty years of age. His son, Mr. W. Lincolne Sutton, assisted by Mr. A. E. Johnson, both public analysts, have now revised the work for the eleventh edition. Comparing it with the previous edition, we find the work of revision has been conscientiously carried out and the changes have increased the usefulness of the work. The section on gas analysis has been re-written by Mr. H. Hollings and Mr. J. S. G. Thomas, and we agree with the statement in the preface that it forms a model treatise on a subject not otherwise well catered for. The work is divided into the following parts: (1) General principles, (2) alkalimetry and acidimetry, (3) analysis by oxidation or reduction, (4) analysis by precipitation, (5) applied methods, inorganic substances, (6) organic substances, (7) urine, (8) water and sewage, (9) gas (this section has a separate index). A series of tables required in analytical work is given at the end. The work retains all its old usefulness to chemists.

Systematic Survey of Rubber Chemistry. By Clayton W. Bedford and Herbert A. Winkelmann. 9¼ in. x 6 in. Pp. 385. $7. New York, U.S.A.: The Chemical Catalog Co. Inc., 19 East 24th Street.

This book is a bibliography of the literature relating to the chemistry of rubber arranged on the Patent Office library system under both author and subject indexes with complete cross-refcrences. There is also an index of patents arranged (according to countries) in numerical order. The real value of the work for reference purposes is due to the fact that abstracts are appended denoting the scope of the article in question which will make the work invaluable to anyone investigating any question relating to the preparation, treatment and manufacture of rubber. The analysis and testing of rubber are omitted as also the botany of rubber. There are two introductory chapters summarising the present state of rubber chemistry. The first of these deals with organic accelerators of vulcanisation and the second with theories of vulcanisation. The intensive activity and rapid progress in vulcanisation of rubber make these very apropos in their utility. The author and subject indexes each consist of about 145 pages. The former shows not only the reference to original paper or patent, but also states the location of information in various libraries to save time-wasting searches. The subject index correlates data on out-of-the-way subjects, such as agency, colloid chemistry of rubber, viscosity, and depolymerisation. The compilation and arrangement of the indexes with their explanatory paragraphs must have entailed an extraordinary amount of detailed labour, and the authors have produced a work which can well serve as a model for other sections of the chemical industry.

The Secrets of Mail Order Selling. By Cyril C. Freer. 9 in. by 5½ in. Pp. 224. 15s. London: The Library Press, Ltd., 83 Southwark Street, S.E.1.

Mail-order selling presents many fascinations; and when one compares the success of one style of appeal with that of another it is difficult to refrain from imagining that there are many secrets which he who would be successful would like to know. The secrets unveiled here are those which are usually connoted by organisation and method, with a thoughtful consideration of all the factors which make effective postal sales by advertisement. The author is well equipped to deal with his subject, and the book is full of sound instruction and advice. The frontispiece shows in graphic form the complicated machinery required in the passing of goods from the manufacturer to the prospective customer, and concludes with: "The sales effort must be strong enough to force its way past local competition and the reluctance people have to (1) write a letter, and (2) buy a pig in a poke." The book is profusely illustrated with styles of advertisements which have proved successful, and the various points are considered and comments made. It is natural that, in a mail-order business, advertising is the most important consideration, since the indifference of the multitude must be overcome by appeal through the medium of illustration and the printed page. It follows that it should be striking and original if it is to be effective; and the pathway is beset by so many difficulties that even the seasoned campaigner can gain considerable information from studying this volume. This is not all: the goods are considered, together with office organisation, methods of despatch, filing and analysis of inquiries with the necessary follow-up where business has not resulted. Fiually, several trades are discussed, including perfumes and toilet goods, on which terse comments are made. The pages are full of information, and the book is well and attractively written. It is probably one of the best works yet published on this alluring but "tricky" form of doing business.

Heterozyklische Verbindungen. By K. Kautzsch and J. Schmidt. Part I. 10 in. by 7 in. Pp. 320. Swiss francs 15. Part II. 10 in. by 7 in. Pp. 268. Gold marks 10.20. Berlin: Urban & Schwarzenberg, 105B Friedrichstrasse.

These two volumes form parts 123 and 131 of the text-book on biological working methods, edited by Prof. Dr. E. Abderhalden, and deal with the more important biological bases constituted by homonuclear and heterocyclic compounds containing nitrogen, their recognition and reactions, physiological properties, constitution, derivatives, and methods of preparation. The subject-matter is divided into groups based on the central nucleus—pyrrol, pyrrolin, pyridine, piperidin, quinoline, purin—and in each group the occurrence, isolation, synthesis and reactions of the base are described, followed by descriptions of the various derivatives, methods of synthesis and properties. The very complex nature of most of these compounds and their inter-relationship are made clear by the extensive use of structural formulas, and the value of the work is enhanced by numerous references to the literature. The synthetic chemist will find a wealth of useful information in this compendium, which covers such a wide range of biologically vital compounds, many of which form the basis of the newer synthetic remedies. Indeed, most of the latter represent our efforts to improve on the chemical constitution of the naturally occurring, physiologically active derivatives of many of the compounds to which both volumes are devoted. Thus, pyrrolidin, which occurs in tobacco leaves, is probably the

Reviews of Technical Books

simplest member in the chain of heterocyclic plant alkaloids, since among its derivatives figure atropine, cocaine, nicotine, and sparteine, while the biological importance of purin and its derivatives has long been recognised, since Scheele demonstrated the presence of uric acid—2.6.8.trioxypurin—in urine in 1776, to mention but two of the groups which figure in the subject-matter of this text-book, which at the same time affords a valuable survey of our knowledge of the chemistry of these compounds

Cancer: Its Causation, Prevention, and Cure. By John Harger, M.Sc., Ph.D., 7½ by 4¾ in., pp. 139, 5s. Liverpool: C. Tinling & Co., Ltd., 53 Victoria Street.

This addition to the popular treatises on cancer is another non-medical critique advocating dietetics as a means of preventing and curing cancer. Though following to a certain extent the same lines as Mr. Ellis Barker's book on the same subject (it was written previous to the publication of the latter), it differs in being more logical and scientific in discussing this difficult subject. The medical evidence in favour of improper dietary causing cancer is taken mainly from the works of Drs. L. D. Bulkeley, Robert Bell, Forbes Ross and John Shaw. The author begins with a simple presentation of nuclear division, and stresses the importance of blood plasma in cell nutrition of the human body. If "but one essential constituent is missing . . . new cells cannot be formed at the same rate at which the worn out ones decay." "The formation of cancer is due to some deficiency in the nutrition of the cells in the part concerned, which deficiency the white blood corpuscles are endeavouring to rectify." These extracts give the gist of the author's views, and he contends that the prevention and cure of cancer are essentially research problems for the chemist and biologist. The chapters on food (digestion and assimilation), vitamins, dietary are sound in principle, though the language is exceedingly simple for the benefit of the public. Though much shorter than Mr. Ellis Barker's book, it covers practically the same ground, and utilises the same idea as constipation being the root evil of cancer to vitamin starvation; whilst the cure is vitamin food with "ballast" and mineral salts. Though the book does not penetrate deeply into the physico-chemical concepts which probably control cancerous growths (hydrogen in concentration of plasma), the subject matter is presented logically and not dogmatically, as by Mr. Barker. The author, who is one of the "wretched chemists" stigmatised by Mr. Barker, hits back by suggesting that "Mr. Barker should take a course of chemistry and get the hang of the wretched thing called logic." Diets are given for cancer patients, but the ideas on conservation of mineral salts and vitamins are of far more value. Much more, however, has to be learnt about physiological value of proteins and quantitative relationship thereto of vitamin B before dietetic treatment of cancer can be anything other than empirical. The work is an honest attempt in the public interest in prevention of cancer through more rational feeding.

Chemisch-Technische Vorschriften. By Otto Lange. Third enlarged and revised edition. Vol. IV. 10½ in. by 8 in. Pp. 772. Leipzig: Verlag von Otto Spamer.

The fourth, concluding, volume of Dr. Lange's well-known compendium of chemical technology deals with artificial manures, explosives, and foodstuffs. The first, a tome of 1,047 pages, is devoted to metals and minerals, the second to fibres and masses (wood, cellulose, animal and vegetable fibres, hairs, feathers, celluloid, glues, etc.), and the third to resins, oils and fats. It is impossible within the compass of a review to do justice to this truly monumental work, characteristic of German methodicity in the laborious task of compilation. The author's aim is to present an exhaustive collection of practical formulas, manufacturing methods and processes covering every branch of chemical industry. The material contained in this work is based on data afforded by German and foreign patents, technical text-books and journals, collected in the library of the Bavarian Polytechnical Association. Its practical value is greatly enhanced by the inclusion of a reference in each case to the source of the information given, and in this respect it represents an almost unique review and index of the available literature, more particularly German sources, pertaining to each of the subjects which come under consideration. To manufacturers especially the large extent to which patents have been drawn upon will afford much valuable information. A brief review of one of the articles dealt with will best illustrate the method adopted in presenting the subject-matter. Five chapters are devoted to wool fat, entitled "Extraction of Wool Fat from Wool Washings"; "Purification of Wool Fat"; "Methods of Purification and Extraction with Acids and Alkalis"; "Distillation of Wool Fat"; "Wool Fat Preparations and Substitutes." The first chapter is prefaced by a reference to a publication dealing with "Wool Fat and its Extraction," apparently the only work devoted solely to this subject known to the author. This reference is followed by abstracts from technical journals and patents. In the second chapter an abstract of the original patent for the manufacture of lanolin forms the first note, followed by a description of the special features contained in six later German patents. In the fifth chapter, devoted to this product, we find a reference to a paper in the "Zeitschrift für Angewandte Chemie," 1918, p. 415, describing the preparation of a cheap substitute for lanolin for pharmaceutical purposes, consisting of a mixture of pure petroleum, 70 parts; paraffin (melting-point 60° C.), 20 parts; anhydrous lanolin, 5 parts; water, 100 parts; and cetyl alcohol, 10 parts. It is stated that this mixture does not become rancid, and a cold cream may be prepared by adding 250, instead of 100, parts of water. In the fourth volume references are to be found to methods for obtaining argon and helium, followed by eight chapters devoted to abstracts of patents and publications dealing with the manufacture of hydrogen peroxide, in which reference is made to Kingzett's investigations on the effect of the addition of various substances to prevent the decomposition of solutions of hydrogen peroxide, with a cross-reference to another chapter in which peroxide soaps and washing powders are treated. These brief indications will convey some idea of the comprehensive nature of the work, its value as a source of technical information on manufacturing processes, and as a compilation of references to the literature, particularly German, embracing practically every branch of applied chemistry. Incidentally it affords an interesting, concise review in abstract form of modern manufacturing methods and their development.

Applied Pharmacology. By A. J. Clark, M.C., M.D., F.R.C.P. 9 in. by 5½ in. Pp. 389, with 46 illustrations. 15s. net. London. J. & A. Churchill, 7 Great Marlborough Street, W.1.

The author states in the preface that his aim is to bridge the gap between pharmacology and therapeutics, and certainly he has succeeded in bringing out the more scientific side of the therapeutic action of drugs, though, as he admits, the summaries of the physiological and pathological problems connected with body functions are necessarily dogmatic, and represent only one view of controversial subjects. Nevertheless, this type of treatment makes for clarity. Thus in the first chapter on disinfectants the specific action of chlorine compounds corresponds to available oxygen liberated, whereas the coal-tar disinfectants show selective actions towards bacteria which provide an example of action on cells exceptionally easy to investigate. The naphthols (in comparison with lysol and the new quinine derivatives) (eucupin and optochin) are used to illustrate the practical importance of selective action in treatment of diseases of bacterial origin. Optochin is 1,000 times more

Reviews of Technical Books

toxic to pneumococcus than the diphtheria bacillus. Chapter II on the use of disinfectants is especially interesting to pharmacists who, though conversant with skin sterilisation by alcohol or iodine tincture, will find that conventional treatments of sore throats do not escape criticism and censure. Thus, sucking of antiseptic lozenges in infections of the tonsils is of little value, potassium chlorate in particular being devoid of any antiseptic action. Gargles do not reach the tonsils, but glycerin paints are the most effective, the glycerin acting as a dehydrating agent. The subdivision of disinfection of the eye, urethra, naso-pharynx, mouth, gut, wounds, and urinary antiseptics, sorts out also the uses of colloidal silver, sprays, salol, eusol, and urotropine. Mercury and arsenic (as salvarsan, etc.) form the subjects of the next two chapters, their fate in the body being described. The action of quinine in malaria and emetine in dysentery, anthelmintics, alcohol, anæsthetics, depressants, and local anæsthetics are each dealt with separately, and bring together invaluable information on principles of therapeutic action. Thus one learns that the bromides depress the central nervous system because the body cannot distinguish between bromides and chlorides; hence the former are excreted slowly. Again, narcotics possibly act by altering the lipoids in the cell membrane and disturbing its power of selective permeability. The action of drugs upon the nerve endings is followed by a series of chapters on the pharmacology of various organs (alimentary canal, heart, respiration, kidneys, uterus, etc.). Anyone interested in the chemistry of life will find these chapters of absorbing interest. It is unusual to find such a mass of difficult subject-matter so arranged and co-ordinated as to be understandable by anyone with general knowledge of science. The regulating mechanism of the body is revealed in its simplicity of action and complexity of detail. The work includes and summarises succinctly more new information now ordinarily available. Thus the vitamins are "discussed" before passing on to "radiation," therapy (cancer), the endocrine glands, immunity reactions (antitoxins, etc.), and protein poisoning. A chapter on physiological standardisation of drugs includes the work which differs greatly from that normally published on its subject, in that physical chemistry is given an importance which is a foretaste of the importance of bio-chemistry in the medical treatment of the future. It is a pleasure to find a multiplicity of subjects dealt with without waste of space with scientific accuracy in simple language. Though a medical book, it is one which pharmacists can read with profit, enjoyment, and understanding of the drugs which they handle.

A Text Book of Materia Medica. By Henry G. Greenish, D. ès Sc., F.I.C. Fourth edition. 9½ in. by 6 in. Pp. 586, with 270 illustrations. 25s. net. London: J. & A. Churchill, 7 Great Marlborough Street, W.1.

Greenish's materia medica is designed for students of pharmacy and medicine. To the former it has become their Mecca in the pilgrimage of pharmacognosy, for whosoever has learned the lore therein, needs nothing more in regard to *general* knowledge of drugs. At first glance there is little change compared with its predecessors; even the second edition of 1909 embodies most of the material retained in 1924. This shows the original scheme was sound enough to stand the test of time, and a solid foundation of common-sense knowledge with comparative methods of instruction is the secret of the popularity of the work. Greenish alone has his inimitable diagnostic features, which in a few lines give the characteristics of the drug that count. The detail is worked in around these in a manner which sustains interest in each drug monograph, which includes separate headings and paragraphs for source, description, microscopical characters, constituents, uses, varieties, and adulterants. Closer examination shows many alterations in detail. Slightly smaller type (two sizes) enables the new matter to be incorporated without increasing the size of the book. Several new illustrations are added, while others (such as *Pilocarpus jaborandi*) have been taken out because they no longer apply. Organotherapy supplies the most important new illustration, which includes suprarenal gland (adrenalin), gall-bladder (fel bovinum), and pancreas (insulin), among other organs. A diagrammatic illustration is also given of the Islet of Langerhans. These have added quite a new interest to the animal products used in medicine. The bulkier drug section is treated as previously, divided into sections, such as leaves, flowers, fruits, seeds, herbs, barks, etc., artificial subdivisions which in practice are far more convenient for comparison than taxonomical arrangements. The new matter here is mainly changes following research upon active principles of drugs, though these only serve to emphasise how little is known about the action of drugs. The poor student is still to be pitied. Formerly he was expected to be able to remember offhand the ingredients of conf. sennæ, now he is faced with the following list of chief constituents of senna: rhein, alve-emodin, kaempferin, and iso-rhamnetin (besides others), while he must remember that the first two methylanthraquinone derivatives, though purgative, do not represent the activity of the drug. Digitalis is another example in which confusion remains, though the author is exceedingly explicit in presenting the facts in their crudity. Among the alkaloidal drugs more certainty prevails, and wisely many, though not all, methods of assay have been left out. There is also much to be said on a student's book for leaving out discursive details of doubtful principles. In this connection we looked at insect flowers to see if this included this year's chemical characterisation of the principles toxic to insects, but were disappointed. The number of drugs included tends to expand; thus henna, yohimbe, and cotton root might be sufficiently important for the student, though others, such as adhotoda and pepo, can scarcely be called for except at rare intervals. It would be a pity if Greenish's materia medica became overburdened with unwanted knowledge, such as the huge American reference works. This criticism cannot be levelled at the additions to the monographs on oils and fats, etc., which are practical and concise. Though the detail work of the book calls for admiration, one looks in vain for mention of the antiscorbutic properties of lemons or oranges. Pepsin strengths are not stated, though this has been made of a purity corresponding to 1 to 20,000 strength, instead of normal 2,500 or 3,000. The lists of adulterations are extended, which again illustrates that pharmacognosy gains much and loses little. An example of this liability to retain the obsolete is seen on page 511, which states "*recently*" a factitious substitute "perugen" has been made for storax, this statement being the same in the 1909 edition. The note on p. 344, that "helerin is an effective antiseptic, particularly for the tubercle bacillus," is not in accord with the high standard of information in the book. Pituitary and other glands appear under thyroid just after parathyroid, and would be better treated separately. These are merely minor criticisms against blemishes on the mirror of truth in the work. In general, improvements have been made by cutting down articles relating to drugs of lesser importance (such as laurel leaves and barberry bark) or dietetic articles (figs, prunes, raisins), while the additions are often important, as seen in the illustration of santonin and revised article on ergot, which clarifies its confused therapy. One would like, however, to see a synopsis of the new accessory food factors (vitamins). These can hardly be out of place in the record of therapeutic progress, because starches are given in detail. In conclusion, it must be emphasised that the work remains a model of what a book on materia medica should be—interesting, instructive, and accurate—on history, origin, and descriptions of drugs.

Personalities

MESSRS. GEORGE DARROLL, J. McJannet, and John Main have been appointed members of the Cape Colonial Pharmacy Board.

MR. F. P. DIVECHA, of Wright & Co., Bombay, who has been on a visit to this country and the Continent since July, is returning this week to India.

MESSRS. A. FIVIE, M. W. Stranack, and E. Tyson have been appointed members of the Natal Pharmacy Board for a period of five years from October 1, 1924.

MISS BETTY STAINER, King's College Hospital, London, younger daughter of Councillor J. W. Stainer, Ph.C., Folkestone, has been granted the diplomas M.R.C.S., L.R.C.P.

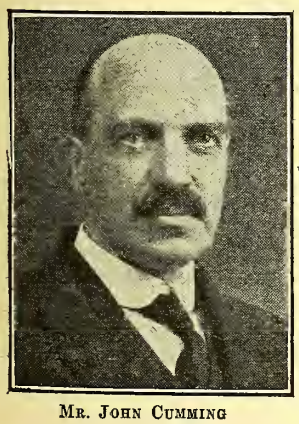
MR. E. W. DUSENBERG, of Fairchild Bros. & Foster, New York, who has been in this country on a business trip, is returning to the United States on November 15 by the "Berengaria."

MR. JOHN HAGUE, chemist and druggist, deputy-Mayor of Lincoln, was the recipient of a cordial vote of thanks from the City Council on retiring from the office of Mayor, held by him during the past year. It was suggested that the change will entail an unusual amount of work, on account of the fact that the new Mayor is also a member of Parliament.

MR. JAMES BARNES, Minyip, Australia, who was the first to pass a pharmacy board examination in Australia, and holds the first receipt issued by the Victorian Pharmacy Board in connection with the examination fee (dated August 27, 1877), is the only chemist in Victoria, and probably the only one in Australia, holding the qualifications of chemist, dentist and veterinary surgeon. Mr. Barnes is a native of Newlyn, Cornwall.

MR. P. J. THOMPSON, F.C.S., chemist and druggist, was the guest of honour at a reunion of the Bath Branch of the Pharmaceutical Society, on November 6 (p. 721), when he was presented by the members with a photograph of himself and a silver salver, as a token of appreciation of his services in connection with the visit of the British Pharmaceutical Conference to the city. Mr. Thompson, who was formerly on the staff of the Bath and West of England College of Pharmacy, has recently taken up an appointment in London.

THE drug trade has contributed fewer names than usual to this year's list of mayors. The first in the alphabetical order of boroughs is Crewe, where Mr. John Cumming, chemist and druggist, has been elected. Mr. Cumming qualified in 1889, and has carried on business in Crewe for thirty years. One of his sons was killed in action in 1916, and the other, Captain H. Duncan Cumming, passed safely through the ordeal of war, distinguishing himself by winning the Military Cross (with bar). Folkestone again secures the services of Alderman E. J. Bishop, chemist and druggist, a partner in a London business and Mayor in 1910-11 and 1922-23. The choice at Rochdale has fallen on Alderman Edward Thomas, chemist and druggist, proprietor of a business the parent shop of which was opened in 1834 and transferred to its present site in 1840. The new Mayor of Stafford is Mr. H. Eymer, chemist and druggist (J. Marson & Son, chemists), who entered municipal life two years ago. To these may be added the name of a retired chemist and druggist, Mr. A. E. Fox, who has been elected Mayor of Banbury.



MR. JOHN CUMMING

Births

Notices for insertion in this column must be properly authenticated.

BOGGIANO.—At Mainsgate, Melbreck Road, Allerton, Liverpool, on November 9, the wife of Felix A. Boggiano, chemist and druggist, President of Liverpool Pharmacy Club, of a daughter.

PATERSON.—At Burnbank, Queen Street, Buckie, on November 2, the wife of Alex. S. Paterson, M.P.S., of a son.

Marriages

EGLINTON—SWANN.—At Knock Methodist Church, Belfast, recently, Thomas Johnston Eglinton, R.D., Sandy Row, to Helen Ross Swann.

Deaths

BENJAMIN.—At his residence, "Maesderwen," Stanwell Road, Penarth, on November 5, Mr. John Blake Benjamin, chemist and druggist, 104 Glebe Street, aged sixty-two. Mr. Benjamin, who was a native of Brecon, had experience in London and Cardiff prior to commencing business at Penarth. He was an active member of the Cardiff Pharmacists' Association, and served at various times as Vice-President and secretary: in 1909 the Association showed its appreciation by the presentation of an illuminated address. Mr. Benjamin was also a member of the Glamorgan Pharmaceutical Committee. He leaves a widow and a daughter. At the funeral, which took place on November 8, the following members of the drug trade attended:—Mr. S. W. Hague (President, Cardiff Pharmacists' Association), Mr. J. D. Jenkins, Mr. E. Poole, Mr. C. Morgan, Mr. H. F. Davies, Mr. R. Davies, Mr. H. A. Hobbs, Ph.C., Mr. H. Francis, and Mr. Jesse Hatton.

BREESE.—At Mitcham Lane, Streatham, London, S.W.16, on November 5, Mr. Charles Breese, chemist and druggist, aged fifty-five. (*See* p. 702.)

BUTCHER.—At Mostyn Road, Bow, London, E.3, on November 2, Mr. George Edward Butcher, chemist and druggist, aged eighty-eight.

KERSE.—At 2 Windsor Avenue, Gosforth, on November 5, Mr. W. Kerse, late representative of Taylor Gibsons, Ltd., manufacturing chemists, Newcastle-upon-Tyne, and previously manager to John Ismay & Sons, wholesale druggists, in the same city, aged seventy-four. Mr. Kerse joined the staff of John Ismay & Sons when a young man, and after experience as traveller succeeded Mr Ford as manager On their business being closed in 1920, he joined Messrs. Taylor Gibsons. Mr. Kerse was treasurer of the Newcastle Pharmacists' Association for twenty-five years, and his services were recognised by a presentation when he retired from office. He leaves two sons and a daughter.

KOENIG.—The death is announced, at the age of fifty-five, on October 28, following a long illness, of Dr. Ernst Koenig, head of the photographic department of the colour works of Meister, Lucius & Brüning, Hoechst-on-Main. Dr. Koenig was the author of several well-known text-books on photographic processes, and was a recognised authority on photochemistry and the use of dyes, and their applications in the Pinatype process, in filters, for colour-sensitising emulsions and as desensitisers.

MANSON.—At 50 Comiston Road, Edinburgh, on November 9, Jeanie Cassels, wife of Mr. W. M. Manson, chemist and druggist.

MARTIN.—At Dulwich Village, on November 8, very suddenly, Mr. William Martin, for many years with Lewis & Peat, Ltd., 6 Mincing Lane, London, E.C.3.

THE business at 70 City Road, Cardiff, formerly carried on by Clarke's Cash Chemists, Ltd., has been taken over by Mr. H. F. Davies, chemist and druggist, and Mr. J. W. J. Newton, chemist and druggist, who will conduct it under the style of Davies & Newton.

Trade Notes

APPLE BLOSSOM PERFUME is one of the Velvee-Cling series of perfume offered by Benton-Smith, Ltd., Dalton Street and Bull Street, Birmingham.

LILAS (SPURWAY) is "the last word in lilac perfumes," state Spurway et Cie, Ltd., 89 Great Eastern Street, London, E.C.2, in the advertisement pages of this issue.

XMAS BUSINESS.—A good selection of lines suitable for Christmas trade is given in the advertisement in this issue of William Edwards & Sons, 14-18 Nile Street, City Road, London, N.1. These are chiefly toilet requisites.

CREPIN & DOUMIN, LTD., 15 Cooper's Row, London, E.C.3, have been appointed the sole agents for Great Britain and Ireland of the Etablissements A. J. Maret, distillers of essential oils and natural perfumes, St. Germain-en-Laye.

HARLEY'S RODINE.—New and revised trade terms for Rodine rat and mouse destroyer come in force on November 17. Although an advance has been made in the prices Mr. Thomas Harley, Perth, claims that Rodine yields still a very liberal profit to the chemist.

THE KEENE LABORATORIES, 52 Gray's Inn Road, London, W.C., have arranged a painting competition for children which is to be worked by means of illustrated booklets obtainable through chemists. Trade terms and details will be sent on application.

"SANAWAVES" ELECTRICAL TREATMENT.—The British Wolmuth "Sanawaves" Co., Ltd., 27 Soho Square, London, W.1, makers of the "Sanawaves" electro-galvanic apparatus, invite chemists to write for trade terms. The apparatus is one that can be used by customers in their own homes.

RUPERT & Co., 64 Kingsley Road, Liverpool, send us a sample box of the antiseptic pastilles advertised in the *C & D.* last week. The pastilles are supplied either put up in tins to sell at 1s., or the pastilles, boxes and labels are sold separately to chemists who prefer to pack the pastilles themselves. There is financial advantage in the latter course.

GLYMIEL JELLY.—To advertise Glymiel jelly, Osborne, Bauer & Cheeseman, 258 Euston Road, London, N.W.1, have issued an illustrated booklet for distribution by chemists. The firm are arranging to send a supply of these to chemists, and to enclose them with orders. Sample parcels are mentioned in the advertisement, and these, it will be noted, include a liberal quantity of free samples.

CUTEX WINDOW DISPLAY.—The details of the new window display sent out by the agents for Cutex manicure specialities (Quelch & Gambles, Ltd., 211-215 Blackfriars Road, London, S.E.1) are given in an advertisement in this issue. The illustration there given hardly does justice to the background show-card that is supplied. It is printed in rich colours, and is informative as to the uses of Cutex preparations. The centre panel is 27 in. high and 16 in. wide, and there are side panels and separate showcards, in addition to a supply of dummies for completing the window display.

FAULDING'S EUCALYPTUS OIL.—Referring to our report on the exhibit of F. H. Faulding & Co., Ltd., in the Australia section of the British Empire Exhibition (*C. & D.*, August 9, p. 224), the company write objecting to the opinion there expressed as to the quality of the eucalyptus oil. The company inform us that the statement on the label, "This oil contains . . . . not less than 50 per cent. eucalyptol," was printed to conform with the requirements in South Australia, and that this label was used in a mistake. The eucalyptus oil exhibited was fully up to the requirements of the British Pharmacopœia; therefore our warning was unnecessary.

VINOLIA PRODUCTS.—Vinolia Co., Ltd., Lever House, Blackfriars, London, E.C.4, have sent us specimens of some of their products which are specially wrapped for Christmas trade. The style of packing is in keeping with high-class articles. The Vinolia handkerchief box, for example, is a handsome box in imitation crocodile containing a bottle of eau de Cologne and two tablets of soap, the box being designed as a toilet-table container for handkerchiefs when the perfume contents have been used. Vinolia sample boxes are supplied in four assortments; these contain a sample bottle of perfume, two cakes of soap and samples of shampoo, talcum and complexion powders. Another package contains two cakes of soap and a bottle of one-drop perfume. There are, in addition, other packages of perfume. This gives an idea of the assortment which is being offered, about which the company will be glad to send fuller details.

Trade-marks Applied for

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1924, p. 289.

(From "The Trade-marks Journal," October 22, 1924.)

"SALTEX LIVER SALT" on label, including sphinx device ("Saltex" disclaimed); for liver salt (3). By T. Kerfoot & Co., Ltd., Bardsley Vale Mills, Lancashire. 449,183. (Associated.)

Facsimile signature, "PROF. DR. H. PAGENSTECHER"; for medicines (3). By H. Pagenstecher, 34 Kapellenstrasse, Wiesbaden, Germany. 449,394.

"ENERVIN"; for a medicated tonic wine (3). By Grierson, Oldham & Co., Ltd., 25 Haymarket, London, S.W.1. 450,862.

"DIVEXOL"; for medicinal chemicals (3). By W. Sheil, The Offaly Pharmacy, Bridge Street, Tullamore, Ireland. 450,566.

"KARNOL"; for an antiseptic styptic (3). By Secol, Ltd., Engine Street, Smethwick. 452,057.

"CONTOIL"; for a medicated preparation (3). "TOPHET"; for a tonic medicine (3). By Lamberts (Dalston), Ltd., 60 Queen's Road, Dalston, London, E.8. 452,078/079.

"KID"; for metal perfume sprayers (13). By M. Franck, 49 Boulevard de Mémilmontant, Paris. 450,589.

"ELFIN" under device of same; for vacuum flasks, etc. (15). By B. E. Siegheim, 11 Oat Lane, Noble Street, London, E.C.2. 450,613. (Associated.)

"The BEDCOSY" with device of bed ("Bedcosy" disclaimed); for india-rubber water bottles (40). By The North British Rubber Co., Ltd., Castle Mills, Fountainbridge, Edinburgh. 450,340. (Associated.)

"ODORCOL"; for a flavouring and colour compound (42). By Clayton & Jowett, Ltd., 5 Concert Street, Liverpool. B450,179.

"FLOROSAN"; for perfumery, etc. (48). By A. De St. Dalmas & Co., Ltd., 40½ Belgrave Gate, Leicester. 450,161.

"WAVOLINE"; for a hair preparation (48). By O. P. Swift, 34 Princess Square, Bayswater, London, W.2. 450,079.

"LAVORIENT"; for perfumery, etc. (48). By West End Marketing Co., 41 Bryanston Street, London, W.1. 451,092.

(From "The Trade-marks Journal," October 29, 1924.)

"ANTIWATTA"; for all goods (1). By R. Grainger, S. Marks and J. Muir, 20-21 Queenhithe, Upper Thames Street, London, E.C.4. 451,285.

"HELICIDE"; for insect-destroying preparations (2). By E. R. Bugge, 102 Westcombe Hill, London, S.E.3. 450,991.

"DRO"; for chemicals (2), medicinal chemicals (3), and for perfumery, etc. (48). By De Roubaix, Oedenkoven & Co., 2 rue du Seigneur, Borgerhout, Antwerp, Belgium. 451,800/801/575. (Associated.)

"GERMOL"; for a skin preparation (3). By The Veno Drug Co., Ltd., Chester Road, Manchester. 447,364. (Associated.)

"FATHER JOHN'S" over framed portrait of clergyman; for medicinal chemicals (3). By Carleton & Hovey Co., 73-93 Market Street, Lowell, Mass., U.S.A. 436,644. (Associated.)

Information Department

INFORMATION WANTED

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated:

E/1011. Camamilla
E/1011. Cormick's bladder pills
W/811. Duffell's hair tonic
B/811. Edwards' medicated napkins
E/1011. Exterminine
B/811. Fuller brushes (London supply)
H/1111. Jordan's Old Lavender Water
R/2510. Palmer's water spray
A/1111. Pesules
S/811. Sulphotoxine

Observations and Reflections

By Xrayser II.

The Half-Guinea Window

proposal would work, very unequally, and I am not surprised that your correspondents seem generally disposed to decline it. It presupposes that every window is of the same value, which, as Euclid says, is absurd, unless we add the Irishman's rider to the statement that one man is as good as another, "Yes, bedad, and better." I am strongly of the opinion of "Unus" that this is a matter that can be most satisfactorily arranged between individual firms. The retailer is the best judge of the value of his own window, and he would be foolish to give up the right of disposing of it on his own terms; the manufacturer, on the other hand, best knows what terms will pay him, and would be equally foolish to allow himself to be tied by any agreement not to pay what he thought worth while—either more or less than 10s. 6d. The proposal would be more plausible if the half-guinea were to be a minimum charge, but the effect even then would be small and of doubtful value. It might enable some small pharmacists to get more for their windows than they otherwise would, or it might prevent their letting them at all.

Mr. Woolcock's Views

on "Experiments in Protection," in his address to the Society of Chemical Industry (*C. & D.*, November 8, p. 686), are likely to be accepted by most of those who are interested in the question. Mr. Garland, indeed, differed from him as regards the failure of Part II of the Safeguarding of Industries Act, but there is room for two opinions there, and the difference between the two critics was not, apparently, really serious. Mr. Woolcock is not reported to have said that this part of the Act was a *complete* failure, and Mr. Garland's very modest remark that it had been "of some advantage" is compatible with the view that it had not been a complete success. Personally, I think failure may more appropriately be predicted of it than success. Certainly the working of the Act (and I would extend this remark to both parts of it) justifies Mr. Woolcock's desire that the mistakes of the past will be avoided in future legislation of the kind, if not his hope that they will be.

Beyond Receiving Reports,

on which there was no further action taken, and electing and restoring members (not a very urgent business), this month's meeting of the Council did nothing but pass a few purely complimentary resolutions; and it is questionable whether it is worth while to incur the expense of these meetings every month, and the inconvenience to which country members of the Council are put by attending them. Less frequent meetings, or the power of postponement when there is "nothing doing," would mean a considerable reduction of expense, and, so far as appears, make practically no difference in the conduct of affairs. One of the reports referred to—that from the Ministry of Health on the Therapeutic Substances Bill—was serious enough, but since it was only another slap in the face for us we could afford to wait another month for it. The serious results likely to follow if this Bill in its present form becomes law were pointed out in your "leader" of April 19, but the Society is apparently powerless to effect any modification of its provisions. It should be noted that on the advisory committee referred to in the report pharmacists have only one representative out of four, while different medical bodies have two. It is provided in the Bill that medical men shall be allowed to prepare vaccines for one another, while pharmacists cannot prepare them at all unless licensed to do so. Taken in connection with its restriction of research, this shows the injustice as well as the impolicy of the Bill.

The Letters

you published in your last week's issue on the subject of proprietaries in Insurance prescriptions confirm my opinion, more than once expressed in these columns, that one of the chief evils of the day in our business is the multiplicity, not only of proprietary medicines, but of accepted formulas, whether official, semi-official, or demi-semi-official, or without anything more than a known and approved status. The first-named we must perforce put up with, and the last do not sensibly affect us; but it is intolerable that we should be compelled, at whatever loss to ourselves, to stock, or procure extemporarily; every preparation of the intermediate classes at the whim of any prescriber, however cranky or opiniated he may be. We are assured that we have the sympathy of the Ministry of Health, but the good that does us may be estimated by the Smethwick cases, to which one of your correspondents pertinently refers. This is a matter which the Retail Pharmacists' Union ought to take up vigorously and not let drop till some more equitable ruling has been obtained.

The Pyridine Question

cropped up again, in conversation with a surgeon with a large practice, a day or two after my last week's note on sick-room spirit was written. Discussing with him a case in which there was a possibility of bedsores, I asked whether he was aware of the presence of pyridine in present-day methylated spirit. As I had anticipated, he was not, and he seemed considerably perturbed by the information, being in the habit not only of prescribing the spirit as a preventive of sores, but of using it for his hands in operations. He asked where industrial spirit could be obtained, and I could only refer him to your article and recommend inquiries from the houses supplying him with surgical appliances. I suggest that this is a question that pharmacists who have the opportunity would do well to bring under the notice of any medical men with whom they have dealings.

"Substitution"

has a little useful light thrown upon it by Colonel Harrison in the remarks you quote in the article on "Hospital Drug Economy." Colonel Harrison recommends in hospital practice the "substitution" of inexpensive medicines that will "do just as well" for others that are over-expensive. Nobody, I suppose, would quarrel over such economy as this. Is not the chemist in his own business to be allowed, when he can do so without offence, to suggest a similar economy to his customer? The fact that he benefits himself by doing so, though it should make him careful not to provoke that criticism of his action, does not affect in any way (so far as I can see) his moral right to practise such "substitution" as this, with his customer's consent. I fancy the difference between us who preach this view and those who condemn it is mainly that the latter cannot distinguish "substitution" from "passing off." In theory they may do so, but not in practice.

Here is an Anecdote

to match that of your correspondent "Caligraph" (*C. & D.*, November 8, p. 695). I was once waiting for an order in one of the best shops in Birkenhead when a doctor came in and asked the chemist what he had sent to the lady for whom said doctor had written a prescription at two o'clock that morning. "I sent what you ordered, doctor, of course," was the reply. "Yes, but what was it?" asked the doctor. "Here is your prescription," said the chemist, handing it over the counter. The doctor took it, puzzled over it for a while, and then said, "Well, what did you send," "What you prescribed," was again the answer. "Yes, yes," said the doctor peevishly, "but what the devil was it? *I* can't read this thing, though I can see it is my own fist." The chemist, however, refused to say more, till the doctor burst out laughing: "Ah, well, it's all right," he cried, "the woman's better."

NOT A CHEMIST AND DRUGGIST.—"The Daily Telegraph" of November 6 publishes a disclaimer from the President of the Pharmaceutical Society to the effect that the name of the defendant in a recently reported betting case is not in the Register of Chemists and Druggists.

16

Sixteen years of study—sixteen years of close concentration upon the chemistry and biology of milk—sixteen years of perfecting the Process which transforms the world's finest milk into the world's most famous Baby Food!

Glaxo is not the rule o' thumb by-product of a commercial dairy. You recommend Glaxo with confidence because you know that its consistent quality, purity, and uniformity are the logical result of scientific control by highly-qualified chemists and bacteriologists. *Push Glaxo—it pays!*

Glaxo

"Builds Bonnie Babies"

GLAXO, 56 OSNABURGH STREET, LONDON, N.W.1.

ROBINSON'S of CHESTERFIELD for CARDBOARD BOXES
ROUND · OVAL · SQUARE · FOLDING
ROBINSON & SONS, LTD. ◆ CHESTERFIELD & LONDON

COVER-ALL SHOPKEEPERS POLICY
One Premium — One Policy — One Renewal
A complete form of Fire, Motor & Accident cover at special rates.
PROVINCIAL INSURANCE COMPANY, LIMITED.
Chief Offices: STRAMONGATE, KENDAL. 32 OLD JEWRY, E.C.2.

LIQUID PARAFFIN
STERNS LTD.
80 Royal London House, Finsbury Square, London, E.C.2. (2)

COUNTRY CHEMISTS
WE offer you best value in Sheep Dips (approved), Disinfectants, Seed Dressings, Embrocations and Powders. Bulk or own name packing.
Write for list. Only address :—
Tomlinson & Hayward, Ld., Lincoln
ESTABLISHED 1842.

ETHYL METHYL ABSOLUTE ALCOHOL
WRITE FOR PRICES
F1 Cale Distillery,
J. BURROUGH, Ltd., LAMBETH, S.E.11

VITMAR
VITMAR is a necessity, it makes good the vitamin deficiency of every-day diet.
VITMAR builds up a natural resistance to disease.
The chemist who recommends VITMAR, recommends himself—and IT PAYS!
WRITE FOR SPECIAL DISPLAY TERMS:
VITMAR, Ltd., Southfields, S.W.18

Editorial Articles

An Irish Pharmacy and Poisons Bill

I

A SERIOUS Pharmacy and Poisons Bill within the British Isles is a sufficient novelty to be considered in detail. So loose was the drafting of the original Acts in Great Britain, and much of the carelessness was later copied into the Irish Act, that it raises one's curiosity to find out whether the draftsmen for the Government of Northern Ireland, which is introducing the new Bill, have learned anything from experience. This Bill is promoted to establish a Pharmaceutical Society of Northern Ireland, to regulate the qualifications and to provide for the annual licensing of pharmaceutical chemists, chemists and druggists, and druggists in Northern Ireland, to amend and extend the law with respect to the sale of poisons; and for other purposes incidental thereto. It is a Bill of thirty-one clauses,

while the parent of these Acts—that is, the Pharmacy Act of 1868—is very much shorter. It will be seen that the divisions of pharmacy in Ireland are still to be perpetuated in Northern Ireland, so that it would appear no compromise for simplifying pharmacy in that country was possible. One point stands out which might appeal to ultra-enthusiasts for the British Society, and that is the provision for the annual licensing. The constitution proposed for the Council is very different from that prevailing in this country; indeed, one would think that pharmacy is really a subordinate part of the medical faculty. We find in Part II of the Bill that the Council is to consist of a President, a Vice-President nominated by the Minister for Home Affairs from among the persons nominated under Part I of the Schedule, and when we look at Part I we find twelve persons to be nominated by the Minister of Home Affairs after consultation with representatives of the pharmaceutical chemists carrying on business in Northern Ireland at the date of the passing of this Act. But this is only the beginning, and the subsequent development is a little more democratic. We find six persons shall be nominated by the Minister after consultation with the three classes, namely, pharmaceutical chemists, chemists and druggists, and registered druggists; two persons nominated by the University of Belfast and one person nominated by the joint executive committee of the Ulster Medical Society and the Ulster Division of the British Medical Association. The last two nominated persons hold position for three years, the others go out of office by rotation, and will be subject to re-election. The method of election is indirect. Before examining closely the provisions of the suggested Bill, we notice that the poisons section is based largely on the British Schedule. There is a difference, and this is the inclusion of the changes which have been devised for the British Schedule but not yet published in the Gazette. Another modification is noticed which goes further than the Dangerous Drugs Act, which is the same for both countries, and that is coca in Part I reads: "Containing 0.1 or more per cent. of coca alkaloids"; the Dangerous Drugs Act is: "Cocain: 0.1 per cent. or more." There appears to be nothing in this schedule relating to the labelling of the amount of the contained poison. In the examinations the subjects are laid down, but the scope may be a variant. In Part IV is included botany, chemistry, physics, materia medica, pharmacy, practical pharmacy and dispensing, Latin and prescription reading and business methods. This is an extension which many of our Councillors have sighed after, but their efforts have failed to conform it with the Pharmaceutical Society as being a professional body only. The inclusion in this Irish Schedule may start the hare again. It will be interesting to see how "Business methods" comes to be defined, as it is fuller of pitfalls than any technical subject. The Bill is of great interest, and is well worth further consideration into the details.

The Weakness in Mercury

SINCE the position of mercury was dealt with in our issue of September 27 last (pp. 460-461) the market has steadily tended downwards to the aggregate extent of £1 10s. per bottle, based on the average quotation of about £10 10s. noted towards the close of last week. The interesting forecast on prices made to the "Drug and Chemical Markets" by a prominent London dealer (*C. & D.*, November 8, p. 692) seems fairly well in line with what may be expected before there can be any question of a notable revival in the general demand. The suggested figure of £10 per bottle is quite likely to be reached in the early future in this market, even if the Spanish mines do not proceed far enough with concessions to justify the establishment of that basis. Whether new buying, either direct from the Continental producers or through the London market, will, after a further fall, prove sufficiently large to make for any very sharp temporary recovery is somewhat dubious, although there is no doubt that consumers practically everywhere have allowed their reserve stocks to dwindle to low dimensions. This assumption is based on the abnormally reduced outlet secured for several months past. There is now a gradual adjustment of terms going on at sources of production which became inevitable. The predicted price of £10 was the figure at which the London market stood at in the earlier part of this year when it was already overshadowed by the considerable shortage which became apparent from the hold-up of operations at the Almaden mines. In the absence of returns of output, the extent to which stocks at Almaden have again been accumulating is guesswork, although we were given to understand quite recently from a trustworthy quarter that the Spanish stocks had been accumulating steadily in the course of this year, and more particularly since there has been a normal resumption of working under the new and much improved methods of exploitation. At any rate, sufficient information has leaked out that a very full Spanish production, say at the rate of 40,000 to 45,000 bottles, is already in sight, which would compare with 32,923 bottles for 1922 and 38,083 bottles for 1923. Therefore a substantial increase of Spanish production has to be taken into consideration, apart from the growth of the Italian output, which includes, of course, the production of the Idria mines. The whole of the output now under Italy's control apparently amounts to over 50,000 bottles per annum, and as the attempts which are said to have been made by the Spaniards some time ago towards the creation of a working agreement with the Italian mines proved a failure, it is to be assumed that the market may be influenced by the policy pursued by Italy, the largest producer. Under the pronounced lack of confidence for some time past in a decidedly falling market, the surplus stocks available are presumably still considerable. An analysis of the figures we give below, making allowance for home consumption on the basis of about 12,000 bottles per annum, which may be regarded as a reasonable estimate, would convey an approximate idea of the London stocks in existence at the end of September:—

Bottles	1923	1924 (9 months)
Total home imports ...	34,351	18,492
Total re-exports	16,198	5,246
Net imports	17,153	13,246
Less home consumption ...	12,000	9,000
Apparent surplus stock ...	5,153	4,246

Thus assuming that 5,153 bottles were carried over from last year, this would make with the balance shown for the nine months this year, a total surplus of about 9,400 bottles on October 1 last. A renewed setback in the American output is only to be expected, while the futility of building up their local industry is undoubtedly now being recognised at the reduced level of prices, in spite of the tariff of 25c. per lb. American ores running on an average only about 0.5 per cent. of mercury compare, of course, very unfavourably with European, yielding returns varying from about 2 to 4 per cent. of mercury. America will therefore remain dependent on foreign supplies for about two-thirds of her total requirements. Last year her imports were 20,914 bottles.

Soviet Foreign Trade Policy

AT a recent meeting, in Moscow, of the Soviet Central Executive Committee, M. Krassin, president of the Foreign Trade Department, dealt with the Soviet's foreign trade policy. The Union of Soviet Socialist Republics, he stated, had now decided to return to the system of protection, and the introduction of a new protective Customs tariff was chiefly intended as a means to exert an effective control over exports and imports. In addition, the tariff provided a weapon in negotiations with other countries to secure advantages for Soviet exports, or in other directions. Further, the tariff would safeguard certain branches of industry which were as yet unable to meet foreign competition, while the revenue derived from this source would form a very important item in the budget. The most effective means of protecting Soviet industries lay, he continued, in the organisation entrusted with the control of foreign trade, the Vniesztorg, which holds the monopoly of imports and exports. Protection is to take the form of strictly limiting the imports, or exports, of certain goods to definite amounts, based principally on the working plan of the Soviet industry, and on the general plan of production set up by the U.S.S.R. Soviet Russia, M. Krassin stated, would make the biggest mistake were it to rely on tariff duties for the protection of its industry, for the capitalistic Governments might meet these duties by the grant of export subsidies. The tariff wall at the frontier was chiefly intended to establish whether the imports and exports were actually covered by licences issued by the Vniesztorg.

Chemical Society

AT the ordinary scientific meeting of the Chemical Society, held on November 6, at Burlington House, Piccadilly, London, W.1, Professor W. P. Wynne, F.R.S., in the chair, four papers were read. In a paper entitled *Investigations on the Dependence of Rotatory Power on Chemical Constitution. Part XXIV. Further Experiments on the Walden Inversion*, read by Dr. J. Kenyon (in collaboration with Mr. H. Phillips and Mr. H. G. Turley), the authors described the results of investigations into the inversion of the rotation of lævorotatory lactic acid, which on esterification gives dextrorotatory ethyl lactate. The latter yields a sulphonate, which reacts with potassium benzoate to give dextrorotatory ethyl-α-benzoxy propionate, whereas a lævorotatory compound of the same rotatory power is obtained by the action of benzoyl chloride on the above dextrorotatory ethyl lactate. The authors assume that the reaction passes through a series of intermediate stages whereby the ester oxygen atom is the initiator of the reaction, since the SO_2 and *p*-sulphone groups are inactive. The course of the reaction was demonstrated diagrammatically by means of slides, the authors assuming that the active atom is approached by potassium acetate, whereby the potassium atom comes under the influence of the acetoxy-group, then coming more and more within the sphere of influence of the sulphonyl group, whereupon the potassium leaves the acetoxy-group and an α-hydrogen atom is transferred to the newly formed unsaturated group. The change is due to a direct reaction, and not to catalytic action. In conclusion, the authors expressed the opinion that potassium hydroxide is an agent which causes configurative changes, whereas silver oxide does not produce a change of this nature. In his paper, *Studies of Valency. Part V. The Mechanism of the Walden Inversion*, Professor T. M. Lowry remarked that so far nineteen persons have advanced explanations of the Walden inversion, but none of them has yet got *the* theory. Professor Lowry discussed two general hypotheses bearing on the subject, illustrating his remarks by models. According to one view, the asymmetrical carbon atom might be envisaged as a spherical brush to denote residual affinity, whereas the other hypothesis is based on the assumption that on replacement a displacement takes place. The Walden inversion might be explained by taking two ideas from stereochemistry: in the first place, that chemical action takes place between ions; and, secondly, that the carbon atom has not one but two stable configurations, being tetrahedral in neutral compounds, while in other groups it possesses a triangular configuration. A fundamental difficulty is encountered in the fact that a symmetrical molecule is racemic, in which case on its introduction we get racemisation, not inversion. To get over this difficulty Professor Lowry assumes that the group passes in as an ion. Inversion might be explained by the action of acetate groups pushing off sulphonate groups. Assuming a tetravalent carbon atom in plane configuration it would be possible to have an intermediate ionic compound, in which a positively charged carbon atom attracts two negatively charged ions. However, this scheme would apply only to the exchange of positive radicles, and so far no positive exchange has been recorded in the Walden inversion. In conclusion, Professor Lowry remarked that the Walden inversion goes deep down into the mechanism of chemistry, and might call up entirely new results. This paper gave rise to a very animated discussion, in which various views regarding the mechanism of inversion were advanced. Dr. E. B. Maxted presented a paper on the *Adsorption of Catalytically Poisonous Metals by Platinum. Part I. The Adsorption of Lead and Mercury*. In tests on the decomposition of hydrogen peroxide it was found that the activity of a catalyst varies linearly with the bulk concentration of the poison, for instance, mercury, lead and zinc. The connection between the activity of the catalyst and the poison depends on the concentration of poison on the surface of the catalyst. The adsorption of poison by platinum was measured, whereby it was found that using lead acetate only the lead exerts a poisonous effect, the acetate ion being without action on the catalyst. Basing himself on the results obtained, Dr. Maxted stated that the action of the poison might be attributed to its effect of saturating a given number of valency forces on the surface of the catalyst, with the result that the activity of the latter is reduced. Experiments with mercury yielded the same results, whereby it was established that mercury is intensely poisonous to a platinum catalyst. Mr. W. E. Downey (with Mr. H. J. Emeléus) read a communication on *Spectroscopic Study of the Luminescent Oxidation of Phosphorus*. After referring to previous work on the spectroscopic examination of the phosphorus flame, the results were given of investigations undertaken by the authors to establish whether the spectrum of the phosphorus flame burning at high temperature in air enriched by oxygen differed from the flame produced when burning in air under reduced pressure. Under the first conditions phosphorus shows five broad bands in the ultra-violet portion of the spectrum, while when burning under reduced pressure at a lower temperature it emits five groups of narrow bands which occupy the same positions in the copper doublet as the bands obtained with a flame temperature of 800°.

THE EXCURSION TO FRENCH SPAS, organised by the Annual Association of Pharmacy Students, was conducted by Prof. Délépine. Prof. Hérissey and Prof. Radais, Dean of the Faculty of Pharmacy, also accompanied the party. The caravan mustered 90 at the Gare de Lyon, but only 89 on arrival at Valence, one lady student, having gone to sleep in the train, awakening on the shores of the Mediterranean. The first place visited was Vals, a small place mostly frequented by dyspeptics, and which does a large trade in bottled waters. At Uriage, where began the long series of Alpine sulphurous springs, M. Pay, pharmacist, organised a motor trip to the Grande Chartreuse. Allerard was reached by motor car. The waters here are said by Prof. Landouzy "to hold the record among the most sulphurous in the world." Containing a high proportion of hydrogen sulphide they are generally used for inhalations (hot or cold) in respiratory affections. Challes-les-Eaux was the next stage, then Chambéry was visited and Aix-les-Bains followed, where the students visited the actual grotto whence the water issues, and where the heat and sulphuretted hydrogen vapours are sufficiently suffocating to make the sojourn as brief as possible.

Opium Conference

Two international conferences have been summoned by the Opium Commission of the League of Nations to meet in Geneva during the month of November. The first conference, which opened on November 3, was summoned for the purpose of considering the steps to be taken to give effect to the provisions of Chapter II of the Hague Opium Convention, which aim at the complete suppression of the use of prepared opium for smoking. The second conference, to which all members and non-members of the League of Nations have been invited, has been convened for November 17 to decide the best means of limiting the world's output of morphine, cocaine and other dangerous drugs, as well as the raw materials from which they are prepared, to meet actual medicinal and scientific requirements. To the first conference invitations had been issued to the Powers having possessions in the Far East and those States in which opium is either produced or consumed; that is to say, Great Britain, France, Holland, Portugal, India, China, Siam, and Japan. Sir Eric Drummond, secretary-general of the League of Nations, opened the conference with a speech of welcome to the delegates, whereupon Heer W. G. van Wettum (Holland), a former director of the opium monopoly service in the Dutch East Indies, was elected President and Prince Charoon (Siam) Vice-President. Great Britain is represented at this conference by Sir Malcolm Delevingne. India and Burma by Mr. John Campbell and Mr. Clayton. On the second day of the meeting a lively discussion arose with reference to the rules of procedure to be followed with regard to the study of the two questions under examination: (1) The use of opium for smoking purposes in the territories belonging to European nations, and (2) the situation in China as regards the cultivation of the poppy, opium smoking, and the measures to be taken in China and in the neighbouring countries. Dr. A. Sze (China) strongly objected to any interference in the internal affairs of China; his country, he declared, would readily co-operate in measures for the suppression of opium smoking, but he would be compelled to ask for instructions from his Government before agreeing to any decisions arrived at by the other Powers regarding measures to be applied in China. Mr. Campbell (India) remarked that if the conference were delayed in consequence of the attitude adopted by the Chinese delegate, then the responsibility for the delay would fall entirely upon that country. Eventually matters were smoothed over. Replying to a statement made by the delegate of India to the effect that 15,000 tons of opium were now produced annually in China, an amount representing 90 per cent. of the total world production, Dr. Sze challenged the accuracy of this figure, and claimed that there was no evidence to show that Chinese opium was smuggled out of the country in large amounts.

Suppression of Opium Smoking

Mr. Katu (Japan) reviewed the efforts made to suppress opium smoking in Formosa, of which he is the Governor, and propounded the measures proposed by Japan to combat opium smoking. For instance, he suggested that licences granted to opium smokers should be progressively withdrawn, and that these should be refused to young men, while undertaking an active propaganda to draw their attention to the evils of this dangerous practice. In conclusion, Mr. Katu expressed the conviction that if all the interested States decided resolutely to combat opium smoking it would be possible to suppress this abuse. M. Rodriguez (Portugal) described the methods adopted in Macao, and Prince Charoon those enforced in Siam. M. Clinchant (France) dealt with the situation in Indo-China, remarking that this country does not produce opium. He then outlined the basis of an agreement between the interested Powers, which would call for the adoption of the following measures: (1) The exportation and importation of raw and prepared opium should be made a Government monopoly; (2) transit and storage should be strictly prohibited; (3) the Government alone should be authorised to sell opium; (4) opium dens should be placed under State control and their number progressively reduced. However, he contended that the most important point was to bring about an effective limitation of the production of opium, since the smuggling of the drug from countries where it is produced presents the greatest obstacle to a complete suppression of the evil. Mr. Campbell presented a report on the situation in India, in the course of which he stated that in consequence of the drastic measures enforced for some time past opium manufacturers had disappeared, and opium smoking had been practically stamped out. Opium smoking had been prohibited since 1891, and the number of licensed smokers had fallen from 34,000 to 3,500.

The Position in India

The fact that two conferences are to be held is largely due to political considerations; the Government of India, according to the "Journal de Genève," contends that in that country opium is not smoked; it is eaten, and for centuries past the Hindus have taken opium as a preventive against sickness. The Indian Government, rightly or wrongly, is of opinion that it is powerless to combat this practice, since the handful of white officials would be quite incapable of eradicating a habit so deeply rooted in a country with a population of 400,000,000 inhabitants. Further, it could not deprive the Hindus of opium without placing at their disposal sanitary arrangements which it cannot provide. It must be added, continues the "Journal de Genève," that although the Government of India does not mention the fact, opium is a source of considerable revenue to the Treasury, and is estimated to bring in from 150,000,000 to several milliards of francs. Mr. Campbell's report was followed by a statement by Mr. Clayton that in Burma conditions were not so satisfactory as in India. Smokers in Burma are registered, and the price of opium is continually advancing. However, while the number of smokers is rapidly decreasing, illicit traffic in opium continues. A somewhat heated discussion followed, largely due to various criticisms and objections made by the Chinese delegate, Dr. Sze alleged that Portugal was deriving a large revenue by tolerating opium dens in Macao, and remarked that if opium were smuggled into Indo-China it showed that the French administration was incapable of taking adequate measures against this practice. These remarks called forth strong protests from the Portugese delegate, while M. Clinchant (France) warmly resented criticism from any Power, particularly from China. Finally, Dr. Sze declared that China was willing to restrict the cultivation of the poppy, and asked for definite proposals regarding the steps suggested by the neighbouring States to assist his country in its efforts. Sir Malcolm Delevingne, in a lengthy statement, regretted the attitude adopted by the Chinese delegate, remarking that he did not seem to realise the chief point at issue—that the production of opium in China was the outstanding factor in the settlement of the problem, since China was the chief producer of opium in the world. He adduced figures showing the extent of the illicit trade in opium in Malaya and Hong Kong. In Burma, he stated, the consumption of smuggled opium was equal to that of the Government controlled product, and in Hong Kong it amounted to one-third. During the last three years an average of three and a-half tons of opium had been seized annually along the Burmese frontier. In order to deal with the subject under discussion, Sir Malcolm proposed the appointment of a committee composed of four members, representing Great Britain, France, Holland, and Japan, to examine the technical points of the question, viz.: (1) The normal quantity of opium consumed per head of the population; (2) the results so far recorded of the system of registration of smokers; (3) opium smuggling. Dr. Sze protested at the exclusion of China from the committee, but the conference by a majority accepted the British delegate's proposal; the Japanese and Siamese delegates abstained from voting on the British and Chinese suggestions. The conference thereupon adjourned on November 6, pending a report from the committee, which, at the time of going to press, had not yet completed its labours.

Associations' Winter Session

Glasgow.—The opening meeting of the Glasgow Pharmacy Club (literary and scientific section) was held in the Royal Technical College on October 29, M. Robert Dickson (President) in the chair, when an interesting address was given by Professor R. S. Rait (Chair of Scottish History in Glasgow University) on *Mary Queen of Scots and Queen Elizabeth*. Dwelling mainly on the early lives of these two Queens, the Professor contrasted their different styles of beauty, difference in temperament, and also their petty quarrels which ended so tragically. At the close of the lecture the club prizes were presented to the successful pharmacy students in the Royal Technical College. Mr. Anthony MacMillan made the presentation, and gave an address to the students. The successful students were: (1) James Aitchison; (2) John Baxter; (3) Charles Leggett.

Hull.—At a meeting of the Hull Pharmacists' Association, and branch of the Pharmaceutical Society, recently, Mr. L. S. Sellé gave a lecture on *Sponges*, describing their habitat and the methods of "fishing." Mr. Sellé instanced some of the dangers that attend divers for sponges, and concluded an interesting address by describing the processes to which the sponge was subjected before it reached the chemist. Mr. R. F. Jones proposed a vote of thanks to the lecturer, remarking that such lectures enabled the chemist to understand the goods he sold. Seconding the vote of thanks, Mr. Brown said that the Association had a valuable asset in Mr. Sellé, who, although he had retired from business, gave much of his time to studying subjects to which other members could give little time. The assortment of sponges and marine curiosities which were on view were lent by Creswell Brothers, London.

Liverpool.—A meeting of the Liverpool Chemists' Association was held on November 5, to protest against the delay of reform in the pharmaceutical service of the British Army. The retiring President (Mr. A. W. Ashcroft) occupied the chair. He said that, not having been of Army age, he had no personal knowledge of what happened, either on the Continent or in convalescent camps at home, during the great war, but there were present ex-Service pharmacists who would state their experiences. The secretary (Mr. J. L. Hirst, President-elect) read letters from Mr. T. P. O'Connor, M.P., and other M.P.'s elected or re-elected for Liverpool, who had promised sympathetic attention to proposals for reform of the Army pharmaceutical service when these come before the House of Commons. Papers were then read or experiences related by half a dozen ex-Service pharmacists. Mr. Frank Wokes, B.Sc., Ph.C., said that promises have been secured from many members of Parliament to support whatever action may be necessary to secure reform, and meetings are being held all over the country to make public the facts. Mr. B. Hale also gave his experiences. Mr. Harold Wyatt, Ph.C., having pointed to the comparatively good Army pharmaceutical services in India, Canada and Australia, suggested that the French service offered a model for this country. What was wanted was an up-to-date service dealing with dispensing, water purification, and other sanitary measures adequate for each existing unit and capable of expansion from reserve contingents in the event of a war or other emergency such as an epidemic. After over an hour's discussion, it was unanimously agreed to support the Pharmaceutical Council in their Press and parliamentary campaign to secure the reform sought.

London (S.E.).—The South-East London Chemists' Association held a general meeting on November 4, at Maitland House, Greenwich. There was a good attendance of members to greet the new President (Mr. W. C. Sayers). Mr. Beale opened a discussion on *Cutting on Street Stalls*. He gave a list of fifteen articles, mostly soap and toilet lines, which were being sold considerably under fixed prices, though only a small proportion were Proprietary Articles Trade Association lines. Mr. Milner proposed that the secretary confer with Mr. Beale and obtain concrete instances, that proper steps may be taken. Mr. Fairweather and the secretary were appointed delegates to the Federation meeting on December 9. Mr. T. W. Cleave then gave a short address on *Salesmanship*. He enumerated the qualities necessary to make a successful salesman; then showed right and wrong methods of handling customers. He emphasised the importance of working for increased turnover, and after dealing with the importance of keeping proper records, he pointed out that chemists as a class were diffident in buying expensive lines, although other traders pushed these as hard as they could. He showed how the stocking of a big price article would pay (even if it did not sell) merely by suggestion helping the sale of medium-priced articles. In concluding, he spoke of the desirability of cultivating the credit side of the business, and gave instances of the small percentage loss in bad debts and the continuity of custom which an account generally achieved. Thanks were accorded to the secretary for his address. Officers for the sports section were then appointed, with Mr. Nightingale as secretary. Conveners for the separate sections were as follow:—*Shooting*, Mr. Foster; *Bowls*, Mr. Ralph; *Tennis*, Mr. Hunt; *Golf*, Mr. Geddes.

London (S.W.).—The South-West London Chemists' Association held the opening meeting of the session on October 20 at Carpenters Restaurant, Clapham, the President (Mr. G. F. Barratt) in the chair. Mr. A. H. Jenkins gave an interesting lecture entitled *Among the Glaciers of the Alps*. Votes of thanks were afterwards accorded to the lecturer and to Mr. Mills for operating the lantern.

Preston.—The Preston Pharmacists' Association held a joint meeting with the Preston Branch of the Retail Pharmacists' Union, on November 4. The secretary informed the meeting of the steps that had been taken in connection with an application for a licence for the sale of agricultural poisons. Some members of the Town Council had been interviewed and had promised their support on the grounds that it was contrary to public safety to increase the facilities for obtaining poisons. A discussion on illegible prescriptions emphasised the difficulties in dealing with doctors responsible. Mr. W. H. Clubb, Liverpool, who should have addressed the meeting, was prevented by an accident, and the secretary spoke on the Chemists' Mutual Insurance Co. The Benevolent Fund box (used at both Association and Society Branch meetings) contained £4. In reply to a question, the secretary reported that all the Parliamentary candidates had been communicated with, and that the present members of Parliament had both promised their support to any action the Society might take regarding pharmacists in the Army.

Thames Valley.—The Thames Valley Pharmacists' Association held a general meeting on November 12, the President, Mr. C. E. A. Goode, in the chair. The President reported on the arrangements that were being made for the annual dinner in February. Messrs. Timms and Clement reported on Insurance matters in Surrey and Middlesex. Mr. T. Minter, Hersham, then gave an address on his experiences in the R.A.M.C. during the war. A paper was then read on behalf of Mr. T. Brand, Whitby, on his experience of *Twelve Months in the R.A.M.C. in Russia*. It was decided to send a letter to Mr. E. T. Neathercoat, J.P., congratulating him on his attempt to enter Parliament, and wishing him success at his next attempt.

Walthamstow.—A meeting of the Walthamstow Pharmaceutical Association was held at the Imperial Café, Walthamstow, on November 5, and presided over by Mr. Edmund Willcocks, when Mr. W. J. Melhuish gave an address on *The Chemistry of Food*. A vote of thanks was accorded to the lecturer, and a collection in aid of the Benevolent Fund of the Pharmaceutical Society realised £1 14s.

Festivities

Whist Drive at Portsmouth

The Portsmouth Ladies Committee associated with pharmacy held a whist drive and dance at the "Goodies Café" on November 5. Mr. W. R. Atterbury, President of the Portsmouth Pharmacists' Association, acted as M.C., and the ladies carried out the other arrangements. Mrs. G. W. Darling presented prizes to the following winners:—*Ladies*: Mrs. Fry, Miss Fogden, Mrs. Guilford, Miss Hunt. *Gentlemen*: Messrs. Young, Henwood, Scarr, and Sweetlove. As a final ceremony, Mrs. Murray (secretary) presented Mrs. Darling with a bouquet.

Pears' Social Club Dance

The Bubbles Social Club (A. & F. Pears, Ltd.) held a Cinderella dance at the Wharnecliffe Rooms, Hôtel Great Central, London, W., last Thursday evening, November 6. The duties of M.C. were undertaken by Mr. Percy M. Sanderson, and the whole of the arrangements carried through by the Club Committee. There were about 350 present. During the evening refreshments were served from a buffet in the Winter Gardens, and several flashlight photographs were taken. The Gwen Rogers Jazz Band was in attendance. That the dance was pronounced by all present to be an unqualified success was due in no small measure to the untiring efforts of the secretary, Mr. P. Bemrose.

Bath Chemists' Reunion

A conference reunion and social evening, arranged in connection with the Bath Branch of the Pharmaceutical Society of Great Britain, and held at the Red House on November 6, proved a great success, a gathering of about sixty spending a very pleasant time together. The President (Mr. W. J. Hallett) was in the chair, and the company included the leading city pharmacists and their ladies. The President said the committee could not let the conference year pass without some effort to bring them together again to spend a pleasant evening and to have a chat about that wonderful conference week. Mr. Williams had already thanked all for the good service rendered, and he should like to add his tribute of praise to every worker who assisted on that occasion. That evening they wanted to have a real social evening, with a touch of the family party in it. Every contributor to the programme was associated with pharmacy in Bath. The first hour and a-half was devoted to music. Solos were sung by Mrs. Robinson, Miss Norris, and Mr. Thomas; duets by Mrs. Robinson and Miss Brewer, and Miss Norris and Miss M. Norris; Mrs. Gedge and Miss Enid Jenkin supplied the elocutionary part of the programme; Miss Jenkin played a pianoforte solo, and Mr. L. Gedge showed some smart card tricks. A Somerset musical sketch, "How time flies," was presented by Messrs. Harold Norris and W. H. Hallett, assisted by Mrs. Robinson. A presentation was made to Mr. P. J. Thompson (see p. 713). After light supper had been served, a whist drive took place, with the President as M.C. The prizes, handed to the winners by the President's wife, were gained as follows:—*Ladies*: Mrs. Rees, Corsham; Mrs. Jenkin, Mrs. Norton. *Gentlemen*: Mr. James Aspell, Mr. D. J. Williams, Mr. Rees, Corsham.

London Chemists' Sports Club

On November 6 the London Chemists' Sports Club held a dinner and dance at the Restaurant Frascati, London, W., Mr. Herbert Skinner, Ph.C., in the chair. There was an excellent attendance. After dinner trophies and prizes were presented by Mrs. Skinner to the winners during the past season as follows:—

SHOOTING.—*Maw Challenge Shield.*—The South-Western Association. Six spoons to the members of the team (G. F. Barratt (capt.), E. A. Atkins, A. M. Garder, J. E. Monaghan, W. A. Shakerley, W. F. Wells). *The Keall Cup* for the best individual average score.—J. Forbes (Western). *Script spoon*, for 1923 winner, F. Noble.

BOWLS.—*Glaxo Cup*, for inter-Association team tournament winners 1924. — North London Association. Four Glaxo Cup replicas (presented by the proprietors of Glaxo) to the team: W. B. Dow (skip.), A. Grassick, J. McRostie, F. Perrett. *Singles Championship.*—Winner (President's prize), T. Rawlins (Northern); runner-up (Duncan, Flockhart prize), L. A. E. Kirkpatrick. *International Bowls.*—Winner, 1924, Scotland. Four cup replicas to team: Harvey P. Arthur, R. Smith, W. S. Glass, T. Bayne. Club Cup winner, Mr. F. Perrett; runner-up, Mr. T. Rawlins *North London (Colts) Bowls.*—Winner, "J. Downing's Prize," G. Tranent; runner-up, "W. B. Dow Prize," H. Bristow.

BILLIARDS.—*Shirtliff Cup*, for handicap tournament.—Winner 1924, G. F. Barratt; runner-up, D. Frame. Replica to 1923 winner, L. A. E. Kirkpatrick.

GOLF.—*Ladies:* August, September, October medal, Miss D. Parker; Mrs. Downing prize, Miss D. Parker, *Gentlemen:* August and October medal, Mr. H. B. Walker; September medal, Mr. F. Cooper; "Ladies' prize," Mr. H. B. Walker.

TENNIS.—*Ladies:* Cup to Mrs. M. B. Swanston; runner-up, Mrs. C. Cunnington. *Gentlemen:* Cup to Mr. H. B. Walker; runner-up Mr. W. E. Swanston. *Mixed Doubles.*—Skinner Cup, Miss A. C. Eldridge and Mr. C. Cunnington; runners-up, Miss L. M. Boyes and Mr. W. E. Swanston.

PUTTING.—August winner, Mrs. Downing; September winner, Mrs. Parker; October winner, Mrs. Perrett; Rawlins Prize, Mrs. Perrett.

Vinolia, Ltd., presented a new cup for individual proficiency, to be called the "Victor Ludorum Cup." Mr. G. A. Malcolm presented a new cup for inter-Association "snooker" competitions, teams of four to represent each Association. The President (Mr. Herbert Skinner) was presented with a cup in appreciation of the work he has done for sport in pharmacy, Mr. Lawman making the presentation. The President, on behalf of the members of the L.C.S.C., presented to the hon. secretary (Mr. W. E. Swanston) a set of golf clubs and bag in appreciation of his work for the Club.

Retail Pharmacists' Union

Birmingham.—The annual general meeting was held on October 17, and the first committee meeting on October 28. The following officers were elected:—*Chairman*, Mr. J. T. Bell; *Vice-Chairman*, Mr. G. Knowles; *Treasurer*, Councillor J. Poole; *Secretary*, Mr. F. Smith; *Auditors*, Messrs. W. Partridge and W. C. Scott. The annual report and statement of accounts, as circulated, were adopted; these show a balance of £33 11s. 9d. Information of the death of Mr. Leopold Joseph, Cardiff, was received with great regret, and the secretary was requested to convey to his relatives the sympathy and condolence of the members.

Hull.—The third annual meeting of the Hull Branch was held at 6 Wright Street on November 4. The secretary (Mr. T. H. Newton) said the year's work had been satisfactory, and although expenditure during the past year had been heavy, Mr. A. T. Thirsk (treasurer) was able to show a small balance. Both reports were adopted. A proposal by Mr. Snowden that all the officers be re-elected was carried unanimously. In returning thanks to the meeting, Mr. Jones pointed out that because of the loss of Mr. Allan one new committee-man should be appointed, and Mr. W. Charlton was elected.

THE OXFORD TRADES EXHIBITION is being held in the Town Hall, commencing on November 17.

A DELECTABLE DISH?—At a recent meeting of Wolverhampton Town Council, during a discussion on the refusal of the health committee to permit the establishment of a fried fish business in Worcester Street, Councillor F. A. Willcock, chemist and druggist, Victoria Street, reminded the members that though a delectable dish, the production of fried fish is obnoxious.

Trade Report

42, Cannon Street, E.C.4, November 13.

ALTHOUGH business in the Mincing Lane produce markets is quiet, there is a remarkably firm undertone in regard to prices generally. Sugar, however, is a weak spot owing to the enormously increased estimates in regard to next year's production. Rubber is not so buoyant, market having reacted 1d. per lb. In the crude drug section, again higher prices are asked for Spanish ergot, and Norwegian cod-liver oil is 2s. 6d. per barrel higher. American peppermint oil is again a feature, with prices still rising and no "firm offers" from distillers. Dementholised Japanese mint oil has sold at higher rates on spot, but stocks are almost non-existent. Menthol is cheaper on spot. Japanese slab camphor meets with keen competition, and is the turn weaker. Vanilla (at auction), cocoa butter, and juniper berries are dearer. Caraway seed is barely steady, and cumin is a trifle easier to arrive. Unusually keen competition prevails in the market for pharmaceutical chemicals, with business by no means brisk. Bromides continue active, and last week's prices are well maintained; aspirin has been selling at rather easier prices. Citric and tartaric acids continue weak. Resorcin is steadier. Industrial chemicals show few changes, business being restricted to a few items. Arsenic is again cheaper; both Epsom and glauber salt have an easy undertone. Lead and zinc products are firm, with both in upward tendency, and copper sulphate is moderately active. Coal-tar products show practically no changes; carbolic acid has a tendency to improve. Among the so-called vegetable oils, business has been much smaller, and prices of a number of items have declined, including castor, coconut, ground nut, soya bean and Hankow wood oils. Linseed is dearer on an active market. Other changes include a reduction in bismuth metal by 1s. 6d. per lb.; mercury is slightly firmer at the close, and antimony is strong. New competition is evident in British rectified spirit, and this resulted in a recent reduction of 6d. per proof gallon.

Higher	Firmer	Easier	Lower
Cedarwood oil	Bergamot oil	Acetic acid	Acid oils
Cocoa butter	Betanaphthol (resub.)	Cadmium	Arsenic
Cod-liver oil	Lemon oil	Camphor (Jp. slabs)	Bismuth metal
Juniper berries	Resorcin	Camphor, crude	Castor oil (Eng.)
Lemongrass oil	Spearmint oil (Amer.)	Citronella oil (Cey.)	Coconut oil
Linseed oil		Cumin seed (c.i.f.)	Geranium oil (Bourb.)
Mint oil		Epsom salt	Ground-nut oil
Naphthas, solvent		Lactic acid (Tech.)	Platinum
Peppermint oil (Amer.)		Menthol	Rape oil
Vanilla		Phenacetin	Soya oil
		Wormseed oil	Wood oil

Cablegram

NEW YORK, November 13.—Business is quiet. Peppermint oil in tins has advanced to \$6.75 per lb. Mexican sarsaparilla is higher at 22c., and balsam peru has advanced to \$1.90. Copaiba is also dearer at 41c. Taraxacum has declined to 26c.; balsam tolu is also cheaper at \$1.65, and mercury has been reduced to \$60.95 per flask.

Zum Marktbericht

Überblick über die wichtigsten Preisveränderungen auf dem Londoner Drogen- und Chemikalienmarkt.

Abkürzungen:—*Ton*=1016 *kg*; *Cwt.*=50,8 *kg*; *lb.*= 453 *g*; *oz.*=28,34 *g*; *Gal.*=4546 *ccm.*

DER Drogenmarkt verhielt sich in der vergangenen Berichtswoche überaus stetig bei etwas festerer Tendeng, Für Mutterkorn (spanische Ware) wurden höhere Preise gefordert. Kardamomen lagen sehr fest, auch Kakaobutter, Wachholderbeeren und Vanille waren höher bewertet. Dagegen tendierten die Forderungen für Kampfer (japanische Ware) und für Menthol nach unten. Pfeffermünzöl ist sehr knapp und der Preis hat scharf angezogen. In pharmazeutischen Produkten herrscht eine scharfe Konkurrenz, trotzdem bewegt sich das Geschäft in eher engen Grenzen. Bromsalze bleiben gefragt bei unveränderten Preisen; Acetylsalicylsäure war etwas billiger. Der Wismutsyndikat meldet eine Ermässigung von 1s. 6d. das lb. im Preise für das Metall. In Schwerchemikalien konzentriert sich das Hauptinteresse auf einige wenige Produkte. Arsenik gab im Preise nach; dagegen Blei- und Zinkverbindungen lagen fest bei weiterer Tendenz nach unten. Für eine Reihe von Pflanzenölen, darunter Rizinus-, Cocos-, Erdnuss-, Soyabohnen- und Hankower Holzöl hat die Nachfrage nachgelassen und man meldet eine Abwärtsbewegung der Notierungen. Dagegen war Leinöl stark begehrt und verkehrte zu höheren Preisen.

Exchange Rates on London

The following is a list of Continental and other exchange rates against the pound sterling on London prevailing at 4 p.m. on Wednesday:—

Place	Method of Quoting	Par of Exchange	November 5	November 12
Amsterdam	Fl. to £	12.107	11.47—11.47¼	11.51—11.51½
Berlin ..	M. to £	20.43	19.15—19.20	19.26—19.30
Brussels ..	Fr. to £	25.22½	95.20—95.25	95.30—95.40
Calcutta ..	Per rup.	24d.	17 15/16d.—17 31/32d.	17⅞d.—17 29/32d.
Christiania	Kr. to £	18.159	31.56—31.59	31.27—31.32
Constntnple	Pst. to £	110	825—835	830—850
Greece ..	Dr. to £	25.22½	257—259	255—258
Italy ..	Lire to £	25.22½	104.85—104.90	105.75—105.85
Kobe ..	Per yen	24.58d.	20 3/16d.—20 5/16d.	20 1/16d.—20 d.
Lisbon ..	Escr.	53¼d.	2 7/32d.—2 9/32d.	2 7/32d.—2 3/16d.
Madrid ..	Pts. to £	25.22½	33.75—33.77	33.96—33.99
Montreal ..	\$ to £	4.86⅔	4.56⅛—4.56⅜	4.59⅜—4.59⅝
New York..	\$ to £	4.86⅔	4.56—4.56¼	4.59⅞—4.59⅝
Paris ..	Fr. to £	25.22½	87.35—87.40	87.05—87.15
Singapore	Per dol.	—	28 1/16d.—28 3/16d.	28 1/16d.—28 3/16d.
Switzerland	Fr. to £	25.22½	23.65—23.68	23.86—23.88
Vienna ..	Kr. to £	24.02	322,000—325,000	325,000—328,000

Crude Drugs, etc.

AGAR AGAR is quiet, Japanese No. 1 offering at 5s. 3d. per lb. on the spot, and January-March shipment at 4s. 3d. c.i.f.

ALCOHOL.—Competition on the part of a new distiller recently led to a drop in the "ring" prices of 6d. per gallon, and for large quantities the basis price of pure s.v.r. is now 1s. 7d. per proof gallon in bond, delivered. *See* also spirit, methylated.

ALMONDS have been in fair demand despite the high prices. Forward prices continue to rise, and spot prices are now 20s. to 30s. below replacement values. Sicily, Bari and Majorca are quoted for shipment at higher rates than Valencia in boxes, the latest offer of Sicily being 188s. c.i.f., equal to 203s. landed terms. Stocks of Morocco are now very small, and there are few offers below 175s. per cwt., and 180s. is reported to have been paid in Morocco.

AMMONIACUM is easier, good drop offering at 1s., and slightly blocky at 9d. per lb.

ANNATTO SEED.—Good bright Madras is being held in some directions for higher prices.

ANTIMONY.—The available supplies being light, the tone continues very firm under a well sustained trade demand, while American inquiries here resulted in some business in Chinese regulus for prompt shipment. Spot lots now range from £51 to £52 per ton. Terms for new shipment are chiefly nominal. Best English refined is quoted £60. Antimony ores are dearer to buy at about 4s. 9d. per unit c.i.f.

ARECA.—The spot price remains at 75s. per cwt.

ARROWROOT meets with a slow sale, with an easier tendency for medium to common descriptions; manufacturing St. Vincent is 8d. to 8¼d., and grocery 9d. to 11d. per lb. There is likely to be no shortage this year, as was the case at this time in 1923; the present stock is 4,083 barrels, against 1,843; imports so far this year have been 9,626 barrels, against 6,092 in 1923, and deliveries 5,072, against 7,336 barrels last year.

BALSAM TOLU is steady and unchanged at 8s. 3d. to 8s. 6d. per lb., and to arrive 7s. 3d. c.i.f. is quoted.

BISMUTH.—On Tuesday evening the ring reduced the price of metal by 1s. 6d. per lb. to 6s. per lb. This is

probably due to liberal supplies and endeavours to curb the operations of outsiders.

CADMIUM.—While the demand has been fair, arrivals have been coming along on an excessive scale, and this has induced sellers to make further slight concessions on the basis of about 2s. 4d. to 2s. 6d. per lb.

CAMPHOR (REFINED).—Japanese slabs are easier, offering at from 2s. 8½d. to 2s. 9d. per lb.; 1 oz. tablets are scarce, and for ¼ oz. 3s. 8d. to 3s. 9d. is asked and 3s. 3d. c.i.f. Crude camphor is also easier at 2s. 4½d. per lb.

CANTHARIDES.—Chinese are quoted on the spot at 4s. per lb., and to arrive 3s. 5d. c.i.f. is quoted.

CARAWAY SEED.—Dutch is barely steady, offering at from 43s. to 44s. per cwt. c.i.f. for prompt shipment.

CASCARA SAGRADA is quiet, with small lots selling at from 77s. 6d. to 80s. per cwt. on the spot, according to quantity.

CASCARILLA.—A small parcel of quills just arrived was disposed of at 4s. 6d. per lb., also siftings at 2s. 6d.

CHAMOMILES are quiet, first Belgian pickings continuing very scarce at from 130s. to 140s. per cwt., and for second pickings from 60s. to 80s. is quoted.

CHILLIES remain cheap, Mombasa and Zanzibar offering at 40s. to 42s. 6d., and Japanese at 135s. per cwt. Bombay capsicums offer at about 60s. for good.

CINCHONA.—At the auction held in Amsterdam on November 5, a total of 63,134 kilos Java pharmaceutical bark was offered, aggregating 1,953 kilos of quinine sulphate. Sales amounted to 24,133 kilos, representing 579 kilos of quinine sulphate, at prices ranging from 42¼ to 115 cents per half-kilo. The next auction will be held on December 10.

CLOVES.—Zanzibar are quiet at from 1s. to 1s. 1d. per lb. on the spot as to quality. To arrive, October-December shipment has been sold at 11¼d., and January-March shipment has buyers at 10¾d. per lb. c.i.f. The week's statistics show landings 24 and deliveries 1,033, leaving a stock of 17,938, against 19,918 in 1923, and 392 bales in 1922. The landings so far this year have been 38,838, against 45,539, and the deliveries 40,227, against 27,650 in 1923.

COCOA BUTTER has advanced by ½d. per lb. to 1s. 5d. for CFR and other brands in not less than one-ton lots.

COD-LIVER OIL has advanced about 2s. 6d. per barrel, finest non-freezing Lofoten quality offering at 118s. per barrel c.i.f. terms, and at 120s. ex wharf London. Our Bergen correspondent writes on November 10 that the price in Norwegian kroner advanced lately, but owing to the rise in sterling, however, refiners still quote 118s. to 120s. per barrel c.i.f. London for finest non-freezing steam-refined quality.

CUMIN SEED is slightly easier, Maltese offering at 82s. 6d. per cwt. c.i.f.; spot is about 85s.

ERGOT.—Again higher prices are asked for Spanish, at from 1s. 6d. to 1s. 8d. per lb. c.i.f. for prompt shipment, and on the spot 1s. 4d. to 1s. 6d. is quoted.

GALANGAL of good quality can be had at 32s. 6d. per cwt. on the spot.

GINGER.—A small business has been done in Jamaica, sound quality of which is valued at 130s. to 155s. per cwt. for common to bold bright; a large proportion of the recent imports have proved to be wormy, with a consequent depreciation in value. Small sales of new crop Cochin have been made at 97s. 6d. to 100s. c.i.f., which is much above the parity of spot values; reports regarding the crop outturn are conflicting. New African crop will not be available in quantity before March-April, but nothing is definitely known in regard to its size; spot value is 90s. and peeled 100s. Japanese for January-March shipment is 88s. c.i.f.

HONEY remains firm and unaltered, full prices being paid for good qualities: pale set Jamaica is 70s., and amber set and setting 57s. 6d. Cuban is 50s. to 55s.; New Zealand, 70s. to 80s. per cwt.

HYDRASTIS.—There are sellers to arrive at 16s. 6d. per lb. c.i.f., but actual spot supplies are scarce at 17s. per lb.; demand is fair.

JUNIPER BERRIES.—Spot sales of Italian have been made at 30s. per cwt., a further advance of 2s. 6d.

LOBELIA HERB.—In spite of the new crop, supplies are quite small, with 1s. 2d. per lb. c.i.f. asked.

MACE has been sold at higher prices, including good pale West Indian at 3s. 10d. to 4s. per lb.; common East Indian is valued at 3s. 3d.

MAGNESIUM.—The tone has been rather harder under restricted receipts from the Continent, and home makers find a steady demand at from 3s. 9d. to 4s. 3d. per lb. for sticks; powder is quoted about 5s to 6s. 3d. per lb.

MENTHOL.—No interest is shown at the moment, the spot value of Kobayashi-Suzuki being 61s., and a shade less on a firm order. Second-hand sellers quote October-November at 55s.; November-December, 51s.; and January-March, 42s. per lb. c.i.f.

MERCURY.—Following on further weakness last week the tone steadied somewhat in the earlier part of this week under more numerous inquiries for home consumers; these, however, were chiefly confined to small lots. Business was done at £10 12s. 6d. to £10 15s. per bottle. The export trade is quiet, and disclosed no new features. Buyers are adhering to a cautious policy, while large importers are not keen to entertain just yet offers for fresh supplies.

NUTMEGS have been in more inquiry, with spot sellers of Singapore 80's at 2s. 6d. per lb. to arrive; Singapore and Penang 80's are quoted at 2s. 10d. c.i.f. (=2s. 11½d. per lb. landed). Higher prices have been paid for broken and shrivelled.

OPIUM.—Market is unchanged and quiet, with 11 per cent. Turkey drug offering at about 31s. per lb. on the spot.

ORRIS.—Fair Florentine sorts can be had at from 33s. to 34s. per cwt. on the spot.

PEPPER quiet. Fair black Singapore is quoted at 5¾d. per lb., Lampong at 5¾d., Alleppy at 5¾d. and Tellicherry at 6d. per lb., all spot. To arrive, November-January and January-March shipment is quoted at 5¾d. c.i.f. London. White Muntok is steady, with sales at from 11d. to 11¼d. per lb. as to quality. Sales to arrive include October-December at 10⅝d. to 10¾d. c.i.f., January-March at 11¼d. to 11⅜d. to 11¼d. c.i.f.

PIMENTO is quiet, with small sales at from 3⅞d. to 4d. per lb.; recent business has been done at 32s. to 32s. 6d. c.i.f. Hamburg.

PLATINUM.—The dullness of demand being unrelaxed, contrary to what had been anticipated, the market has lately weakened to £26 per oz., while it is claimed that there are sellers even at less.

RUBBER has declined 1d. per lb. since our last report; the fall is chiefly due to heavy liquidation on the part of "outsiders," combined with the fact that America has temporarily withdrawn from the market. At the moment a nervous feeling prevails, but a rapid recovery is expected to take place shortly in view of trade requirements, especially from the Continent. The decline in the dollar has also influenced the fall in price, and until things adjust themselves an appreciable improvement is not anticipated. Stocks were further reduced on the week by 931 tons. Quotations (Wednesday), 5 p.m.; No. 1 standard crêpe and ribbed smoked sheet, spot and November 1s. 5⅛d., January-March 1s. 5⅜d., April-June 1s. 5⅜d. per lb.

SAFFRON.—New crop Valencia will be available in from two to three weeks time, and from 140s. to 142s. 6d. per lb. is asked. For actual spot, values are from 150s. to 160s. per lb., with lower figures quoted for inferior grades.

SASSAFRAS BARK OF ROOT.—Natural is quoted at 1s. 3d. per lb., and selected at 1s. 9d. Market is tending higher.

SHELLAC.—The aspect of the market has changed towards ease, this being due to Calcutta advices lately and also to considerably larger shipments for last month, a fair proportion of which is coming to this side. The spot demand has certainly been quieter, although the stocks for last month experienced a decrease of about 2,000 cases to 6,353 cases, this comparing with 9,895 cases a year previous. Spot closes at 325s. to 330s. per cwt.; fine second orange, 345s.; superfine, 390s.; pure button, 340s.; AC cakey, 280s.; and GAL, 270s. Futures have been quiet, the sales including December at 310s., and March delivery at 287s. 6d. to 302s. 6d.

SENEGA continues quiet, single bales offering at 2s. 9d. and quantity at 2s. 8d. per lb.

SPIRIT (METHYLATED).—A new company of methylators outside of the "ring" are offering industrial spirit, 64 o.p., at 2s. 5d. per gallon in 500-gallon lots, 2s. 7d. for 100 gallons, and 2s. 9d. in 30-gallon lots; 61 o.p. is 1d. per gallon less all round.

SLIPPERY ELM BARK.—For grinding quality 10½d. per lb. is asked.

STARCH PRODUCTS.—Dutch maize starch powder is unaltered at 19s. 6d. per cwt., and American is also 19s. 6d. per cwt. net, on the spot. American maize starch crystals is 22s. net, and Dutch crystals is 23s. Best English rice starch crystals is 36s. to 37s., and German or Dutch 29s. per cwt. Dutch farina is unchanged at 21s. for superior, and prompt shipment is 20s. f.o.b. for new crop; superior Dutch (maize) dextrin is 26s. 6d., and No. 2, 25s.; American canary dextrin is 22s. 9d., and white 22s. 6d. per cwt., ex store, London.

VALERIAN.—Good clean washed Belgian is offered at 43s. to 44s. per cwt.

VANILLA.—At auction on Friday there was a good demand, and of 280 tins (chiefly Seychelles) offered, 204 sold at full to higher rates compared with the previous auction. The following rates were paid:—Seychelles, good to fine firsts, 7½ to 8½ in., 40s. to 43s. 6d.; 6½ to 7½ in., 38s. to 43s.; 5 to 6½ in., 36s. to 40s. 6d.; seconds, 4 to 7½ in., 37s. 6d.; 3 to 6 in., 35s. to 36s.; off quality firsts, 5 to 8 in., 33s. to 37s. 6d.; 3 to 5½ in., 28s. 6d. to 34s.; splits, 28s. 6d. to 37s.; various, 32s. 6d. to 35s. 6d.; mouldy, 15s. to 21s.; 7 tins Bourbon, fair, 7 to 8 in., 39s. 6d.; 5½ to 7 in., 38s. to 39s.; 65 tins Java, 30 sold: foxy, 3½ to 7½ in., 34s. to 35s. 6d.; mouldy, 17s.; 4 tins Ceylon sold: loose, 17s. to 22s.

WILD CHERRY BARK.—Thin green of best quality is very scarce and difficult to find on the spot.

Essential Oils

There is a fair demand this week and several important price changes have taken place. The position of American peppermint oil becomes still more stringent and very strong advices have been received recently from Michigan. Japanese mint has probably never before been so scarce in London. Cedarwood oil is dearer and American spearmint has advanced. Cochin lemongrass has been in demand, and is dearer. Spot supplies are limited. Bergamot is firmer for certain brands, and lemon has also advanced. Ceylon citronella is cheaper. Bourbon geranium is lower at the source, and American wormseed is easier.

ANISE (STAR).—"Red Ship" on the spot is dull, and while 2s. 9d. per lb. is the quoted price, 2s. 8d. would probably be accepted. The price quoted to arrive is 2s. 6¼d. c.i.f. for cases from first hands; re-sellers quote 2s. 6d.

BERGAMOT.—The c.i.f. prices have been advanced to 15s. 6d. and 15s. 9d. per lb. in some directions for 37 to 39 l.a. Early in the week current quotations for other brands were 14s. 3d. for prompt shipment and 13s. 5d. for new crop. Spot is 15s. 6d. to 16s.

BOIS DE ROSE (FEMELLE) is steady at 18s. 6d. per lb.

CAJUPUT on the spot is quiet at from 3s. 1d. to 3s. 2d. per lb. as to quantity in bottles. Rectified white is offered at 4s. 6d.

CAMPHOR.—Japanese white in cases has been sold at 63s. per cwt. Drums are quoted at 60s. Chinese is offered at cheaper rates.

CASSIA.—A few cases of 80 to 85 c.a. have been sold at 9s. 4½d. per lb., which is about the current quotation. The price quoted for shipment is 9s. c.i.f. to arrive, but business would probably be done at 8s. 8d.

CEDARWOOD.—American is dearer at from 3s. 9d. to 4s. per lb. January-March shipment is quoted at 3s. 4½d. c.i.f.

CINNAMON.—Ceylon leaf on the spot is quoted at from 6s. 8d. to 7s. 4d. per lb., and for shipment 6s. c.i.f. to arrive.

CITRONELLA.—Ceylon is weaker on the spot at 3s. 1½d. per lb., and for shipment 3s. 0½d. c.i.f. to arrive. Java is steady at 5s. 7½d. to 5s. 8d. per lb. Re-sellers quote 5s. 5d. c.i.f. First-hands quote 5s. 10d. c.i.f.; January-March is 5s. 3d. to 5s. 4d. c.i.f.

The exports of citronella oil (with destinations) from Ceylon for the nine months, January 1 to September 30, 1924, compared with the same period in 1923, are as follows:—United Kingdom, 365,554 lb. and 244,734 lb.; France, 43,530 lb. and 33,368 lb.; Germany, 56,300 lb. and 16,045 lb.; Holland, 11,243 lb. and 12,145 lb.; Italy, 21,869 lb. and 1,176 lb.; Spain, 1,950 and *nil;* Norway, 1,190 and *nil;* West Australia, 2,336 lb. and 1,127 lb.; South Australia, 1,175 lb. and *nil;* Victoria, 17,279 lb. and 8,608 lb.; N.S.W., 18,567 lb. and 4,725 lb.; Queensland, 4,148 lb. and 2,323 lb.; New Zealand, 1,784 lb. and *nil;* U.S.A., 463,054 lb. and 514,330 lb.; Egypt, 390 lb. and 2,350 lb.; Africa, 5,292 lb. and 6,077 lb.; India, 27,889 lb. and 12,596 lb.; China, 4,481 lb. and 1,792 lb.; Japan, 12,045 lb. and 2,272 lb. The total exports were 1,062,377 lb. and 873,419 lb.

CLOVE.—English distillers quote from 7s. 3d. to 7s. 6d. per lb.

EUCALYPTUS is steady at from 2s. 1d. to 2s. 2d. per lb. for 70-80 per cent. cineol.

DILL.—English distilled new crop oil is quoted at about 25s. to 26s. per lb.

GERANIUM.—Bourbon is considerably cheaper to come forward from Réunion. On the spot there are sellers at 31s. 6d. per lb. Algerian is cheaper in some directions at 32s. 6d. to 34s.

GINGERGRASS is offered to come forward at 8s. per lb. c.i.f. for 250-lb. pots and 8s. 3d. for 125-lb. pots.

LAVENDER.—French 38 to 40 per cent. is very firm, from 29s. 6d. to 30s. per lb. being quoted for actual spot.

LEMON.—Higher prices are coming forward at 3s. 1d. to 3s. 4d. per lb. c.i.f. On the spot 3s. 2d. to 3s. 3d. is quoted for good brands.

LEMONGRASS.—Cochin has been in fair demand and is dearer to arrive at 4s. 1½d. per lb. c.i.f., November-December shipment. Spot sellers quote 4s. 2½d. per lb. and supplies are scarce.

MINT.—Spot supplies of Japanese dementholised Kobayashi-Suzuki are practically exhausted, with sales reported up to 20s. 6d. per lb. Shipments now afloat are offered at 20s., landed terms. October-November is 17s. c.i.f.; November-December, 15s. 9d.; December-January, 14s. 6d. For December arrival 18s. 9d. c.i.f. has been paid. The January-March position appears to be subjected to "bear" manœuvres from second hands, and sales are reported down to 12s. 6d. c.i.f.

ORANGE.—Sicilian sweet is quoted at 9s. 6d. to 10s. 9d. per lb. c.i.f., as to brand. On the spot there are sellers at 9s. 6d. to 10s. West Indian sweet is steady at 8s. 6d.

PALMAROSA on the spot is steady at 15s. 6d. per lb. in pots.

PENNYROYAL.—Spanish on the spot is offered at 5s. 6d.

PEPPERMINT.—American natural oil has undergone another sharp advance and fair sales have been made of parcels afloat and on the spot at 33s. 6d. per lb. Some shippers are not offering at present. In other directions 34s. c.i.f. is quoted for afloat or prompt shipment. Spot sales have been made at from 31s. upwards. Supplies are extremely scarce, with limited lots at 32s. 6d. to 34s. A few cases redistilled oil are offered at 36s. H.G.H. is offered to come forward at 40s. landed, London terms. A little on the spot can be had at 39s.

PETITGRAIN.—There has been more inquiry for Paraguayan, which is offered at from 9s. 3d. to 9s. 6d. per lb.

SASSAFRAS.—Genuine American natural oil is firm on the spot at from 6s. 9d. to 7s. per lb.

SPEARMINT.—American is firmer at 17s. 6d. to 18s. per lb.

VETIVERT.—For Bourbon near at hand or on the spot 47s. 6d. to 48s. per lb. is quoted.

WORMSEED.—American on the spot is cheaper at from 22s. to 22s. 6d. per lb. For November shipment 20s. c.i.f. is quoted.

Pharmaceutical Chemicals, etc

THERE is very little change to report in this section, the chief feature being the unusually keen competition for business with holders freely cutting prices. The general tone of the spot position and that on the Continent is steady to firm. Bromides continue to hold at high prices.

ACETANILIDE is receiving attention from buyers, who find supplies limited and prices firm at about 2s. to 2s. 1d. per lb. for B.P. crystals or powder.

ASPIRIN.—Sales continue quite good on spot, but prices obtained are rather lower than formerly; good brands run from 3s. to 3s. 3d. as to quantity.

BARBITONE is unsettled with some dealers quoting up to 14s. 9d., but the few sales have been well below this figure—about 13s. 9d. to 14s. per lb.

BENZALDEHYDE on spot is available at about 3s. 1d. to 3s. 3d. per lb. for f.f.c.; market quiet.

BENZOIC ACID (B.P.) is in free supply on spot at about 2s. 9d. per lb. for reliable make. Ex toluol is offered at 2s. 3d. per lb.

BENZONAPHTHOL shows little life, with dealers quoting about 5s. 3d. to 5s. 6d. per lb. spot.

BETANAPHTHOL keeps very steady at the better price of 3s. 6d. per lb. for resublimed.

BROMIDES.—During the past week there has been continued activity, and the prices mentioned in our last report continue in force, while the quotations from the Continent remain very high for material to come forward. Ammonium still scarce on spot at close up to 2s. per lb. Potassium, B.P. crystals and powder, 1s. 6½d. to 1s. 8d.; sodium, B.P. crystals and granular, 1s. 7d. to 1s. 8d. per lb.

CALCIUM LACTATE of British make is offering to advantage on spot from 1s. 5d. per lb. and upwards. Sales good.

CHLORAL HYDRATE is steady with occasional business at about 4s. to 4s. 3d. per lb. on spot for duty-paid crystals.

CITRIC ACID.—The spot position continues weak at cheap rates with business slow. B.P. crystals quoted at 1s. 3½d. per lb., less 5 per cent.

CREOSOTE (B.P.) is quiet, with prices on spot from 2s. 2d. to 2s. 6d. per lb., according to quantity.

CREOSOTE CARBONATE continues to be mentioned at about 7s. per lb. on spot, with little doing.

GALLIC ACID meets with some business with the price about 2s. 11d. to 3s. per lb.

GUAIACOL CARBONATE, which has been declining in value lately, is offered at 9s. 9d. to 10s. per lb., but some spot holders have been accepting less.

HEXAMINE is another item where price-cutting has been the rule; sales at 3s. per lb. spot.

HYDROQUINONE keeps steady but is rather quiet, as is usual at this time of the year. Spot is from 4s. 3d. to 4s. 9d. per lb., according to quantity.

LACTIC ACID (B.P.) is moving in small lots from 2s. 7d. to 2s. 8d. per lb. Technical 50 per cent. by weight, £43 per ton spot, is cheaper.

METHYL SALICYLATE is irregular on quotation, ranging from 1s. 10d. to 2s. per lb., but at the lower figure the market is very steady.

METHYL SULPHONAL is dearer on offer from the Continent, but some spot offers are still comparatively cheap in the region of 22s. 6d. to 24s. per lb.

PARAFORMALDEHYDE.—Supplies seem plentiful while the demand is not at all brisk. Prices quoted vary as to quantity and run from 2s. 6d. to 2s. 9d. per lb.

PARALDEHYDE of British make is moving fairly well at 1s. 4½d. to 1s. 6d. per lb.

PHENACETIN.—Business has been limited with competition keen. Dealers have been cutting their quotations of 5s. 8d. to 5s. 10d. per lb., and slightly less than the lower figure will buy.

PHENAZONE continues very steady at about 7s. to 7s. 3d. per lb. Some offers slightly cheaper are off the market.

PHENOLPHTHALEIN is not at all steady, with offers varying from 5s. 6d. to 6s. per lb., with business slow.

POTASSIUM PERMANGANATE is bright with inquiry brisk. Spot is firm at 7½d. per lb. for B.P. crystals in drums, with that figure fully maintained to come forward.

RESORCIN is steadier and seems likely to pick up from 5s. 6d. per lb. Some dealers quote 5s. 9d. per lb.

SACCHARIN (550) continues to be quoted at 62s. 9d. to 65s. per lb. for duty-paid powder.

SALICYLIC ACID is now very steady and may recover a little in due course. Prices on spot range from 1s. 6d. to 1s. 7d. per lb. for B.P. and slightly less for large quantities.

SODIUM BENZOATE (B.P.).—The spot quotation is now 2s. 3d. per lb., but with supplies rather free something less would be accepted.

SODIUM SALICYLATE is offering on spot close up to 2s. 1d. to 2s. 2d. per lb. for both B.P. powder and crystal.

SULPHONAL continues to be quoted at 14s. 6d. per lb., with a few sales at about this price.

TANNIC ACID.—B.P. *leviss* is steady but quiet as quoted at 2s. 10d. to 2s. 11d. per lb.

TARTARIC ACID (B.P. crystals).—Quotations continue at about 11½d. per lb., less 5 per cent., with the market weak and not at all active. Offers from the Continent at 11⅛d. per lb. c.i.f. are not attracting business.

TERPIN HYDRATE is steady but dull, with dealers asking 1s. 8d. to 1s. 9d. per lb.

THYMOL.—British make is quoted at about 16s. 3d. to 16s. 9d. per lb.

VANILLIN (100 per cent.).—British make is very steady and in fair demand at 25s. per lb.

Industrial Chemicals, etc.

London, November 12.

THERE is little to comment upon this week in the industrial chemical market. Conditions show practically no change on the week, while business continues rather subdued, and is restricted to a few items. Cornish arsenic is cheaper again, and still flat.

ACETIC ACID is tending easier on a dull market: 80 per cent. technical, £43 10s. to £44; 80 per cent. pure, about £44 10s. to £45 per ton, in barrels; 98 to 99 per cent. glacial, £68 10s. per ton, in glass demijohns, ex wharf, London.

ACETONE seems of no interest, and offers of British Government specification at £94 to £95 per ton do not attract business.

ALUM is moving but slowly, but prices are steady in the region of £9 15s. per ton for lump in casks.

AMMONIA (anhydrous) is not at all active, but dealers' prices for 99.95 per cent. are steady at 1s. 5½d. to 1s. 6d. per lb., in loaned cylinders.

AMMONIUM CHLORIDE continues to sell in good quantities, with dealers quoting firmly at £29 15s. to £30 per ton, in casks, spot.

ARSENIC.—To-day's quotation from the Cornish mines is about £35 to £35 10s. per ton, f.o.r. mines. This is not attracting much business. Japan is now offering at £32 per ton, c.i.f. U.K. port, for January-February shipment. Some inquiry for good quantities for South America are on the market. Price in the U.S. has declined to about 7c. per lb.

COPPER SULPHATE.—There has been a moderately active demand for export, and the tone has been rather firmer, partly due to the rising cost of rough bar copper. There is apparently not much to be got at anything under £25 per ton for casks, f.o.b., less 5 per cent., while quotations mostly range upward of that figure. Home trade is inactive.

CREAM OF TARTAR.—The cheap lots on spot have been cleared and the price is now steady at about 81s. to 82s. per cwt., less 2½ per cent. British makers quote slightly more than this.

EPSOM SALT is a shade cheaper at about £4 17s. 6d. per ton for commercial quality in bags; a fair business has been done.

FORMALDEHYDE is persistently dull, with dealers quoting at about £48 to £48 10s. per ton, for 40 per cent. volume.

GLAUBER'S SALT is offering at cheap rates from the Continent, and this position is likely to affect the spot price, which stands at £3 12s. 6d. per ton in bags.

LEAD PRODUCTS.—Importers' prices are well up to last week's advanced rates, with the market firm and plenty of inquiry on hand. Red lead, £42; litharge, £42 10s.; white lead, dry, £43; ground in oil, £45 per ton, c.i.f. London. Acetate of lead, brown, £44 10s.; white, £45 10s. per ton, spot.

LITHOPONE continues to find very good business, with prices steady at £19 15s. to £20 per ton for 30 per cent. Continental red seal, according to quality.

OXALIC ACID has received a little attention and is perhaps a shade better in tone, but spot is still plentiful at about 3⅞d. to 4d. per lb.

POTASH CAUSTIC is very steady, with fair business at full rates: 88 to 92 per cent. solid, £31 to £32 per ton, in drums.

POTASSIUM CARBONATE is moving on spot, with dealers' prices very steady: 90 to 92 per cent., £22 10s.; 96 to 98 per cent., £24 10s. per ton, in casks.

POTASSIUM CHLORATE is available on spot in small lots at about 2⅝d. to 2¾d. per lb., with the same figures mentioned for forward delivery.

POTASSIUM PERMANGANATE is firm and active on spot, with dealers asking in the region of 7½d. per lb. for commercial, in drums.

POTASSIUM PRUSSIATE.—Importers report good business, with prices ranging from 6⅞d. to 7¼d. per lb. for yellow.

SAL AMMONIAC is moving very well and prices are likely to move against buyers: dog-tooth crystals, £43 7s. 6d. to £43 10s.; medium, £40; fine white crystals, £26 5s. to £26 10s. per ton, in casks.

SALTCAKE for home trade is quoted at £3 10s. per ton f.o.r., with not much offering up to end of year.

SODIUM ACETATE is steady with spot supplies available; dealers ask £23 10s. per ton, ex store.

SODIUM BICARBONATE.—British makers continue to quote for home trade only at £10 10s. per ton, in bags.

SODIUM HYPOSULPHITE.—Pea crystals are steady at £13 15s. per ton, in one-cwt. kegs, with business quiet. Commercial quality at about £9 5s. per ton, in casks, is steady.

SODIUM NITRATE.—Market is idle and prices nominal: 96 per cent., £13 7s. 6d.; refined, £13 15s. per ton, f.o.r. docks, London.

SODIUM NITRITE is seldom in request, with the London price for 100 per cent. about £25 10s. per ton.

SODIUM PRUSSIATE.—British continues to sell at about 4d. per lb.

SODIUM SULPHIDE is steady but very quiet: 60 to 62 per cent. solid, £14; broken, £15 per ton, in drums.

ZINC PRODUCTS.—A stronger feeling generally has been noticeable, because of the considerable advance in zinc metal, the stocks of which were heavily reduced in America last month. Zinc ashes are wanted from the Continent and quoted about £14 to £14 10s. per ton, based on 70 per cent. Zinc dust ranges from £43 to £48, according to quality. Zinc oxide makers are asking about £36 to £46 per ton, according to percentage of purity, while a considerable premium is wanted in some quarters for B.P. There is some talk of a revision of prices.

COAL TAR PRODUCTS, ETC.—Changes of a minor character are recorded, but these do not affect the general position, which remains steady, with business quiet. ANILINE OIL from British makers continues to be quoted at 7⅞d. to 8d. per lb., naked at works. ANILINE SALT is steady but dull as offered by British makers at 7⅞d. to 8¼d. per lb., naked at works. BETANAPHTHOL is steady and occasionally in demand at about 1s. 1d. to 1s. 2d. per lb. TOLUOL, pure, 1s. 8d. to 1s. 8½d.; 90's, 1s. 5d. to 1s. 5½d. per gallon; market flat. XYLOL, pure, 3s. 3d.; commercial, 2s. 3d. per gallon; still dull. CREOSOTE OIL is steady but quiet; about 5½d., ex works, and about 6¼d. per gallon, f.o.b. CARBOLIC ACID crystals is reported to show some little improvement in some directions, but the price of about 5d. per lb. f.o.b. in large bulk packing would no doubt be still accepted for good business. CRESYLIC ACID is firm with the price of pale, 97 to 99 per cent., at 2s. 1d. to 2s. 2d. per gallon. NAPHTHALENE is irregular on offer, with flakes averaging about £15 per ton. Pure METHYL ALCOHOL is of no interest to buyers as offered at about £60 per ton, c.i.f. London. HEXAMETHYLENE is steady but dull; dealers offer at 3s. 3d. per gallon. PYRIDINE remains flat and prices are easy as quoted at 18s. 6d. per gallon. PITCH.—Conditions show little change on the week. The quotation remains at about 45s. per ton, f.o.b. East Coast, with business very quiet.

Fixed Oils, etc.

THE general volume of business has been much less this week, and some items tend to weaken. Castor, coconut, groundnut, rape and soya bean oils are cheaper and quieter. Palm oils continue firm, but may ease a little. ACID OILS.—Prices are lower with the market closing firm: coconut and palm kernel, 44s.; groundnut, 33s. 6d.; soya, 38s., all spot. CASTOR.—Late last week the prices of English pharmaceutical and first pressing were reduced by £1 per ton, and second pressing, £2 per ton, the current quotations being:—Pharmaceutical, £77; firsts, £72; and seconds, £69 per ton net, barrels included, ex mills, Hull, in not less than one-ton lots. Madras for shipment is 71s. 3d. per cwt. c.i.f. COCONUT.—Deodorised on spot is much cheaper at 48s. 6d.; Ceylon is down to 47s. 6d. c.i.f.; while Cochin is dearer at 63s. c.i.f. COTTON.—Prices are rather higher and the market is firm: deodorised, 57s.; common edible, 54s.; soapmaking, 52s.; crude, 49s. 6d., all spot. GROUNDNUT.—Market very quiet at easier prices: deodorised, on spot, 64s. 6d.; crude Oriental, nominal. PALM KERNEL.—Deodorised is steady at about 53s., with crude at about 48s.; market quieter. PALM.—Prices are unchanged to threepence advance on the week, and the market closes firm, but business has fallen off considerably: Lagos, 45s.; softs, 44s. 3d.; mediums, 44s. 3d.; hards, 44s. 3d.; bleached, 47s., all spot. RAPE.—Market dull with prices unchanged: refined, 58s. 6d.; crude, 55s. 6d., all spot. SOYA.—Dull at much cheaper prices: deodorised, 51s.; crude, 48s., all spot. LINSEED (raw, naked).—A good advance for all positions is recorded, with the market closing firm and active: on spot, 46s. 9d.; November, 45s. 6d.; November-December, 45s. 6d.; January-April, 45s. 9d.; Hull, on spot, 45s. 3d.; November, 45s.; November-December, 45s.; January-April, 46s. TURPENTINE.—The market has fluctuated considerably, but exhibited on the whole plenty of resistance at prices very considerably below American parity, and occasionally the tendency was quite firm. The outlook, however, is anything but clear, although American reports are firmer. Last week's deliveries here were the heaviest recorded for a long time past, totalling 4,108 barrels, so that the stocks decreased to 30,133 barrels. This, including 5,000 barrels landing and 13,800 barrels afloat, made the London visible supply 49,368 barrels, against 33,935 barrels at the same date last year. London spot prices closed firm on Wednesday at 61s.; December, 61s.; January-April, 62s. 9d. per cwt. Hankow WOOD OIL is lower at 82s. per cwt. in barrels on the spot.

LUBRICATING, MINERAL, BURNING OILS, ETC.—Solvent naphthas have advanced on an active market. Other products in this section remain quiet at level prices. BENZOL.—Market steady with routine business passing: British makers quote ex works in tank wagons, crude 65's, 10d.; standard motor, 1s. 3d.; pure, 1s. 7d. per gallon: f.o.b. prices including free drums, 6d. per gallon more. FUEL OIL is steady but quiet: .950 gravity, £3 17s. 6d.; .890 gravity, £4 17s. 6d. per ton, ex tank. PARAFFIN WAX and SCALE.—Wax is firm at 3⅜d. to 5¼d. per lb., according to melting point, in bags; scale for shipment, about 28s. 6d. per cwt., c.i.f. U.K. SOLVENT NAPHTHAS show a good improvement, with 90 to 160 active at the better price of about 1s. 2d. per gallon; heavy, 90 to 190, unchanged and quiet at about 1s. to 1s. 0½d. per gallon. PARAFFIN OILS are firm: American standard white, 1s. 1d.; water white, 1s. 2d. per gallon, barrels free; Russian prime white kerosene, 6½d. to 7d.; buyers' barrels filled free, 7¼d.; barrels free, 10½d. per gallon, ex wharf, London. PETROLEUM JELLIES are unchanged on a quiet market: white to snow white, £63 to £65; amber and yellow, £25 to £28; red vet, £22 10s.; dark stiff green, £18 5s. per ton, barrels free, ex wharf, London. WHITE OILS are very quiet at unchanged values: Special No. 1, £38; No. 1, £33; No. 3 half-white, £27; No. 4 half-white, £19 per ton, drums and barrels free, ex wharf, London. LUBRICATING OILS are steady but not active: pales, £13 to £28; reds, £14 10s. to £27: dark cylinders, £15 10s. to £35; filtered cylinders, £22 15s. to £36 per ton, less 2½ per cent., ex wharf, London. SOLUBLE OIL, £20 to £29 per ton, according to grade. No. 1 RUSSIAN OIL on spot at £18 5s. per ton, less 2½ per cent., ex wharf.

Japanese Camphor in U.S.

THE allotment of B B camphor to American makers of pyroxylin plastics by the Japan Monopoly Bureau for the last quarter of 1924 is 1,900 piculs, which is far less than their previous requirements, says the New York "Drug and Chemical Markets." The price is 263 yen per cwt. It developed that only one of the large plastic manufacturers had taken his supply from the Monopoly Bureau, and the amount was only 200 piculs. A strenuous protest was made against the price. The celluloid manufacturers are buying German synthetic camphor and increasing quantities of synthetic are being shipped to the United States at prices below those quoted by the Japanese Monopoly Bureau. Once before, the refusal of the pyroxylin industries to take any B B camphor had a considerable effect upon the allotment system and resulted in a more equitable arrangement. It had been the practice of the Monopoly Bureau to announce no price until the consumers had indicated the quantities which they desired. This was amended so that the price is known before any quantities are fixed upon.

Correspondence

Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

Half-Guinea Windows

SIR,—One is glad to gather that those chemists who have been in the habit of making window shows of other people's goods are at last waking up to the fact that they have been parting with one of their best assets for the price of a mere song. It seems the R.P.U. has now been requisitioned to bargain with advertisers for some improvement in the ridiculously inadequate remuneration that has hitherto obtained. But would not the R.P.U. be better employed in trying to teach those pharmacists who need the instruction how to use their windows for the display of their own goods? The popular craze for branded lines is the curse of modern trade, and we are fast becoming the mere purveyors of patents and proprietaries. Instead of fostering and encouraging this deplorable development by laying in excessive stocks and then giving counter and window displays to help to get rid of them, it surely behoves us to do all in our power to stem the tide by buying sparingly, keeping the stuff in the background and our own goods to the fore.—Yours truly,

Brighton. C. S. ASHTON.

Secret Remedies

SIR,—Your correspondents in these columns who write about "the Profit Squeeze" and "Half-Guinea Window Displays" seem to me to be looking at the subject through an opaque medium. May I suggest that clearer vision would be obtained if the correct title of these goods was always used? Retail pharmacists, when speaking of proprietary articles, largely advertised and duly stamped, use the term "patent medicines," whereas their proper appellation is "secret remedies." Secret remedies should have no place in the world of medicine, for moral reasons. How much longer will the medical and pharmaceutical professions suffer the indignities heaped upon them by the manufacturers of many of these secret remedies? The indignities are not far to seek, they are in fact obvious. We evidently suffer them gladly (more or less), and most of us pay a toll for the doubtful pleasure. Now is the time for doctors and pharmacists to join together to influence the Government to bring in a law that secret remedies shall be no longer secret. Pharmacists are in no way behind other bodies in their consideration for the public welfare, and yet we deem ourselves helpless when compelled to provide the people with expensive "dips" in the sawdust barrel of secret remedies. We are all anxious to raise the standard of pharmacy to a higher level. A higher education will not do it, so long as we have secret remedies chaining the wheels of progress. Continual badgering the manufacturers for larger profits will get us nowhere; but a law to compel these gentlemen to disclose formulas of goods advertised will go far to protect the public's health and pockets, and enhance respect due to the doctor and the pharmacist. The patent medicine stamp is a tax upon the innocence and gullibility of the people: it is an iniquitous tax. I do not expect the Retail Pharmacists' Union to move in this matter—their alliance to the Proprietary Articles Trade Association is too close; but Mr. Denby Day and those in agreement with his recent contributions to these columns should form a very useful and pushful body.—I am, etc.,

Willesden, N.W. MAURICE JONES.

Pushing One's Own Goods

SIR,—Mr. A. W. Cornish (*C. & D.*, November 8, p. 694) tells us that, in his opinion, substitution is never justifiable, because he knows from experience that there are more customers lost through trying to substitute lines other than those asked for than from any other reason. Now, I wonder. Why? Because, a little further on, Mr. Cornish proceeds to tells us that when a manufacturer raised the minimum parcel from £5 to £10, he "introduced" a similar line of his own. No substitution, merely introduction, a much more euphonious term. Not that I blame him. I do it myself.—Faithfully yours,

INTRODUCER (10/11).

SIR,—Surely the manufacturer of a proprietary article, even if it is on the P.A.T.A. list, does not expect the pharmacist, when a customer asks for a good mixture for a cough or whatever his ailment may be, to present the proprietary line in preference to the one of his own packing; for if this is the expectation, it is never likely to be realised. Mr. C. Denby Day says that proprietaries constitute from 55 to 65 per cent. of our turnover; but there is still a market for the pharmacist's own remedies if he goes out to secure it.—Truly yours,

CONSISTENCE (8/11).

Our "Juniors"

SIR,—"Naretev's" extract from the well-known novel, "Children of Men" (*C. & D.*, October 18, p. 582), quotes the hero's failure in his father's drapery business as being due to want of order and method. This is, of course, applicable to our own business especially; and although it is probable that we grow more methodical with added years, it seems to me that the present-day junior is particularly lacking in attention to detail. My experience of junior assistants to-day is that they are prone to what I may call "slap dash" working; measures and utensils are left about on the counter dirty instead of being put in the proper place for washing; pill-machines are put away without being cleaned; dispensing scales are left with powder, etc., on them; when bottles are filled up the liquid is slopped over the counter and frequently over labels and prescriptions left on the counter as well; medicines are dispensed without straining or without the salts being completely dissolved; bottles and boxes not used are left lying about instead of being returned to the proper locker. At the front counter goods are shown to customers and left there for anyone to pick up; drawers are disarranged and the contents shot back in a heap; white demy is pulled out of the drawer two or three sheets at a time and allowed to fall on the floor and left there; bottles are corked carelessly and three or four corks thrown away to fit one bottle; new stock is put on the shelves in front and the old left to stagnate. In the stock room, parcels are used indiscriminately, three or four packets of a line being opened instead of one being used up at a time; lids of boxes are left half-open for dust to get in, and cardboard containers torn across instead of being opened properly; packets are dropped on the floor and left there to be trodden on. All these things have I had to call attention to, and it gives the impression that one is continually finding fault in little details; but if the negligent one is not corrected in a short time the pharmacy would have an unkempt and uncared-for look which would soon make its mark on the returns.

Faithfully yours, METHODICAL (20/10).

A Proprietor's Salary

SIR,—"Proprietor" (*C. & D.*, September 6, p. 376) is so anxious to write off my suggestion as a great effort to change a shilling into two sixpences that he ignores, or is ignorant of, the existence of varying schedules for the assessment of income-tax. If he will come down from his pinnacle and look at smaller men's affairs, he will find that there is a distinct difference between an earned income and one derived from profits, interest, etc. My point is that the working owner should be allowed this difference on an amount equal to the wages he would pay a manager, as the owner works far longer and harder than the so-styled "working man." Similarly, with regard to the purchase of a business, if "Proprietor" had had the experience I have had in the past of futile journeys and useless expense involved in looking into businesses, which were advertised in the manner I complained of, he would appreciate my point a little more.—Yours, etc.,

PROPRIÉTAIRE (8/9).

Legal Queries

W. J. R. (25/10).—We are much obliged for the reminder that apprentices can apply for exemption from payments under the National Health and Unemployment Acts.

S. H. B. (4/11).—When tr. opii 1898 is diluted one of tincture and three of water it contains 0.1875 per cent. of morphine, it is, therefore, outside the Dangerous Drugs Acts and their regulations.

H. B. (30/10).—The title "Autiseptic Healing Ointment" would render the article dutiable under the Medicine Stamp Acts. The other title you send would not incur liability if the word "soothing" is omitted.

W. P. (26/10).—"Pink Antiseptic Ointment" is not a title that renders the preparation to which it is attached liable to medicinal-stamp duty. The addition of your name in the possessive case to the title is not, however, advisable.

H. L. (4/11).—A 4-oz. bottle of glycothymoline sold from a 1-lb. bottle of the preparation would need to be stamped as it would not be a "bulk" package. The exemption from stamping for "bulk" packages is on condition that they are packages of such a size as the public do not purchase, or that the article is used as one of the ingredients of a prescription.

C. & C. (3/11).—Easton's syrup tablets come within Part I of the Poisons Schedule, and may not be sold unless signed for in the poison-book, and unless the purchaser is known to the vendor. Medical men have usually very little knowledge of the Poisons Schedule, and the statement you refer to is not surprising.

H. R. (5/10).—The label you send for skin ointment is on the border line of liability, taken in conjunction with the claims that it has germicidal and antiseptic properties, also that it is to be used on broken skin. The name you use in which perhaps you claim proprietary rights also suggests that the ointment is a curative agent.

C. L. (6/11).—Part I of the Poisons and Pharmacy Act was brought into harmony with the Dangerous Drugs Act in 1920, so that any preparation which is outside the latter Act automatically comes within Part II of the Poisons Schedule. The suggested tablet consequently comes within Part II, since the percentage of anhydrous morphine is below 0.2.

F. B. (8/11) employs a qualified assistant, to whom he pays a salary of £260 a year. Must the assistant be insured under the National Insurance Acts? [As the assistant's salary exceeds £250 a year, he need not be insured under either the National Health or the Unemployment Insurance schemes, unless he is engaged in manual labour, which is improbable.]

T. L. (4/11).—All preparations sold containing a poison must be so labelled, although it is not necessary at present to state the proportion of the poison. A mixture containing three minims of tr. opii per drachm is not a "dangerous" drug within the meaning of the Dangerous Drugs Acts and Regulations. The taste of the mixture can be masked with cinnamon or similar substances with heavy flavours.

K. & S. (7/11).—A doctor is the recognised person to sign orders for Part I poisons for hospitals, or any public institutions. In framing the amendment of Section 17 in the Dangerous Drugs Act and Pharmacy (Amendment) Act, 1923, the pharmacist holding a public appointment was forgotten. The medical man is consequently the only legally recognised person through whom the institution can obtain Part I poisons.

T. L. (3/11).—The modification in Section 3 of the Dangerous Drugs and Poisons (Amendment) Act, 1923, in regard to signed orders for scheduled poisons applies to doctors, dentists and veterinary surgeons only. Everyone else purchasing poisons in Part I of the Schedule must sign the poison-book and be known to the vendor. The authorisation to factory owners to possess cocaine eye drops does not affect the method of supply as stated above.

E. G. (4/11).—(1) The disability of not being qualified to carry on the business of a chemist and druggist can, as you say, be got over by forming a limited company, but the qualified superintendent or the qualified director must be *bona fide* manager of the business. You cannot otherwise legally carry on the business of a chemist and druggist even if you employ a qualified assistant. (2) The title "pharmacy" is not protected, and can be used by unqualified persons, but there is danger in leading the public to think that the business is that of a chemist and druggist. The Pharmacy Acts were designed for the protection of the public.

B. & Co. (5/11) write pointing out that in the *C. & D. Diary*, 1924, on p. 278, it is stated that a wholesaler's spirits of wine licence authorises sales in any quantity of rectified spirits to duly registered pharmaceutical chemists or chemists and druggists, but that when he applied to the Excise for a wholesaler's licence he was told this licence did not authorise the sale of s.v.r. in quantities less than two gallons. They ask what is the explanation of this. [The *Diary* statement is quite correct, and the explanation evidently is that "B. & Co." applied to the Excise authorities for a wholesale spirit dealer's licence (costing £15 15s.), which authorises the sale of spirits in quantities of not less than two bulk gallons at a time, instead of applying for a manufacturing chemist's spirits of wine licence (costing £10), which, as stated in the *Diary*, authorises the sale of spirits of wine in any quantity for the purposes set out on p. 278 of the *Diary*. If "B. & Co." wish to obtain this £10 licence, they must first obtain a justices' certificate, which has to be produced to the Excise before they will issue the licence.]

E. W. (1/11) returned a case of goods to the suppliers a year ago. The suppliers failed to credit "E. W." with the value of the goods, and after several letters had passed between them he applied to the railway company which carried the goods for proof of delivery. This proof was not forthcoming, and ultimately "E. W." made a claim against the railway company. The company, however, repudiates the claim upon the ground that it was not made within three months after despatch. Do we advise "E. W." to place the matter in the hands of a solicitor? He holds proof of despatch. [One of the conditions upon which the railway company accepted the goods for carriage was, no doubt, that any claim for loss must be made within three months. "E. W." does not state when he first wrote to the company; but if no formal claim was made within the stipulated period he has, we consider, forfeited his legal right to redress. It is possible, however, that if "E. W." places the matter in the hands of a solicitor the company may offer to settle the claim by payment of at any rate part of the value of the lost goods.]

W. A. E. B. (4/11) gave an assistant one month's notice of dismissal on a Friday, and, as usual, paid him his week's salary the following day. On the Monday the assistant was at work in the morning and went out for his dinner at mid-day. After that nothing more was heard of him until a fortnight later he sent a note asking for his wages during the period of his absence. In the interval "W. A. E. B." had engaged another assistant, as he assumed that the first assistant had left for good. It now transpires that the assistant was ill. In the circumstances must "W. A. E. B." pay his wages? [As a rule, an assistant's wages are payable during an absence from work on account of illness until the contract of service has been terminated by the requisite notice. Therefore, in the ordinary way, the assistant would have been entitled to his wages up till the expiration of his notice of dismissal, even if he was away ill during part of that period. We consider, however, that by his neglect to advise "W. A. E. B." of his illness he may have forfeited his right to wages unless, in the particular circumstances of the case, it was impossible for him to inform or send word to "W. A. E. B." of his illness. It is a question of fact whether the assistant acted so unreasonably as to warrant his dismissal as from the moment he left work on the Monday.]

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

A. M. (1/8).—(1) DI-ACID MONO CALCIUM PHOSPHATE ($CaH_4(PO_4)_2$), may be made by dissolving calcium phosphate B.P. or the di-calcium ortho phosphate in phosphoric acid, and allowing the solution to evaporate spontaneously. Only just sufficient acid is used to effect solution. The compound has a strong acid reaction and deliquesces in air. It thus dissolves readily in water, but excess decomposes it into insoluble di-calcium phosphate and free phosphoric acid, and there is considerable difficulty in preventing this reaction. A more convenient way is to bake the calculated quantities of calcium carbonate (precipitated chalk B.P.), 100 parts by weight. The hydroxide $Ca(OH)_2$ and acid phosphoric conc., B.P. (sp. gr. 1.5), 300 parts, this being in slight excess, which assists to prevent decomposition. The chalk is added gradually to the acid as effervescence subsides (a little water may be needed), finally the solution is warmed gently to expel carbon dioxide gas, and a little water added if necessary to complete solution. After filtration the solution is evaporated slowly until crystal formation commences. The crystals apparently contain one molecule of water of crystallisation, so that it would be $CaH_4(PO_4)_2H_2O$. (2) SODIUM SULPHATE, obtained as by-product in manufacture of aerated waters in China, could be purified by a crystallisation. If sold for medicinal purposes it would be necessary to test for arsenic limits and for impurities (chloride etc). It is not worth while exporting except to local market.

Santonin (3/9).—We have not been able to improve on your formula for paste sheep-dip, but suggest that the paraffin wax be replaced by beeswax, as we think the former helps to cause the separation to which you refer as it is not saponifiable.

H. C. D. (India) (5/9).—DEGREES IN PHARMACY are conferred in Great Britain by the Manchester, Glasgow and London Universities, but only upon persons who have already taken the Qualifying examination of the Pharmaceutical Society of Great Britain. Ph.G., is not a degree conferred in England or Scotland.

G. E. H. (5/9).—The *C. & D. Diary*, 1925, will contain a synopsis of synthetic and artificial perfumes on the lines you require.

W. A. (17/9).—CLOUDY COPAIBA BALSAM.—The method you have tried for clarification by warming and subsidence should have been effective. All that can be done is filtration of top layer through a *dry* flannel filter bag on a warm place, returning filtrate until deposit forms its own filtering material. The process will be a long one unless both copaiba and filter is kept decidedly warm.

G. T. (22/9).—AFTER-SHAVE LOTION.—The following is from "Pharmaceutical Formulas":—

Menthol	gr. v.
Powdered tragacanth	ʒss.
Rectified spirit	ʒss.
Glycerin	ʒij.
Water to	ʒvj.

Dissolve the menthol in the spirit and add to the tragacanth contained in a dry bottle; add the water, shake; add the glycerin, again shake.

H. T. (23/9).—HAIR LOTION.—The sample you send is a strongly perfumed yellow liquid, containing much spirit (about 65 per cent. alcohol, as indicated by the sp. gr. of the preparation, 0.91). The total solids dried at 100° C. amount to 0.89 per cent., and ash to 0.46 per cent. It is strongly alkaline, apparently with caustic potash; there is present no carbonate, ammonia nor borax. It contains a small quantity of bitter principle, which is probably quassia. No evidence of quinine was obtained.

A. H. (24/9).—We do not know the basis used in the manufacture of "Sanitas" powder.

D. S. (26/9).—HERB FOR WHOOPING COUGH. — This is *Hieracium Pilosella*, Linn., nat. ord. *Compositæ*. It is mentioned in Potter's "Encyclopœdia of Botanic Drugs" as a good remedy for whooping cough and in all affections of the lungs. An infusion of an ounce in a pint of boiling water is taken in wineglassful doses. It is not uncommon in dry places, and has a creeping habit. The leaves are about an inch long, one and a-half inch or less broad, greyish green, and grow in rosettes. The flowers are lemon yellow, like a miniature dandelion, with a reddish streak outside the outer florets. The leaves are easily recognised by the scattered long hairs and the greyish appearance. The hairs of the leaves on both sides are worth examination under the microscope. Another remedy well worth trying for whooping cough is a decoction of the leaves of the Spanish Chestnut *Castanea vesca*. The writer has known a case cured in a week by its use. The directions for its use are given in the above-mentioned cyclopœdia. An infusion of an ounce of the leaves in a pint of boiling water is given in tablespoonful or wineglassful doses three or four times daily.

S. M. (27/9).—The Apothecaries Hall examinations of London and Dublin are medical qualifications and entitle the holder to dispense medicines. This qualification should not be mistaken for the Apothecaries' Assistants' examination, which only entitles the certificate holder to dispense for an apothecary.

S. W. (27/9).—(1) INDIAN BRANDY.—There is no standard for Indian brandy, and therefore a product with a minimum of spirit (the expensive ingredient) is sold. A formula for a cheap product is as follows:—

Itrosyl	ʒj.
Comp. tincture of rhubarb ...	ʒiij.
Chloroform water	Oiss.
Glycerin	ʒviij.
Syrup	Ovj.

(2) The sale of a product under the name of tincture of rhubarb, other than the preparation of the British Pharmacopœia, is a risky thing, as the B.P. formula is taken as the standard unless another can be proved. (3) Syrup of figs is an unofficial preparation and should be fairly inexpensive if made only from figs, sugar and water. For example, 2 oz. of figs is boiled with a pint of water until reduced to 10 oz., and after straining dissolving in the decoction 1 lb. of sugar. The compound syrup is flavoured with essential oils and generally has senna and cascara extract added.

A. B. B. (29/9).—(1) LAWN SAND.—

I	II
Iron sulphate (dried) 15 parts	Potassium bisulphate 1 part
Ammonium sulphate,	Fine sand ... ... 3 parts
Fine sand, of each 5 parts	

(2) WORMS ON BOWLING GREENS.—The solution of mercury perchloride used for this purpose is of the strength of about three grains to the pint. It is generally made in a concentrated form (1 in 10) in hydrochloric acid solution (1 in 8), and of this a teacupful (5 oz.) is diluted with water to ten gallons.

Westminster (29/9).—DECOMPOSITION OF HYDROCYANIC ACID.—The dark liquid you send, the residue of a pint bottle of hydrocyanic acid, is an interesting example of the decomposition of the acid by light. By storing in small blue or amber bottles it is sought to prevent this change (among others) taking place. The decomposition product is paracyanogen. It was at one time suggested that glycerin should be added to the acid to prevent this decomposition.

B. B. & Co. (30/9).—The chemical formula for benzoyl peroxide is $C_6H_5—CO.O_2.CO.C_6H_5$. It is used in 2 or 3 per cent. oily solution as an application for burns and ulcers.

RHUBARB (2/10).—QUININE HAIR-TONIC.—The following is from "Pharmaceutical Formulas":—

Zinc sulphate	gr. xvj.
Quinine sulphate	ʒj.
Tincture of cantharides	ʒj.
Bay rum	ʒiij.
Glycerin	ʒj.
Water	ʒij.

Dissolve the quinine in the alcoholic liquids and the zinc sulphate in the water; add the glycerin to the latter and mix the liquids.

W. H. B. (2/10).—RATE OF PROFIT ON RETURNS.—In a letter to the *C. & D.*, July 7, 1923, "Jay Mack" stated that 25 per cent. gross profit is the standard rate to-day in the drug-trade compared with 33⅓ per cent. up to 1918. "Jay Mack" showed further that it is necessary to write down promptly all soiled and out-of-date stock.

J. W. W. (3/10).—TRAINING APPRENTICES.—The apprentice training plan which "Jay Mack" put forward in the *C. & D.*, September 21, 1918, was in the form of a syllabus. This outline was what we abbreviated in the Compendium.

E. H. (4/10).—HAIR RESTORERS containing lead or other metallic ingredients are really dyes, as they depend upon the deposition of coloured sulphides in the hair. Stimulating applications containing such ingredients as cantharides, jaborandi, ammonia and acetic acid often restore the colour of the hair, but these ingredients are not dyes.

H. R. (5/10).—CHERRY COUGH PASTILLES.—The following is the disclosure of composition of the pastilles you refer to:—Benzoic acid, powdered wild cherry bark, capsicin, spirit of chloroform, pastille basis, of each a sufficiency.

J. J. S. (6/10).—*C. & D.* RETAIL PRICE LIST.—The *C. & D.* costing system for dispensed medicine is given each quarter in the Price List which is sent to all subscribers, generally in the first issue of the quarter. The system was founded upon an investigation made before we issued the Price List in 1922, as was explained at length in two editorial articles in the *C. & D.*, January 14 and 21, 1922. We adopted the Edinburgh price-mark "Melboracis" as the oldest and best known one. In regard to the general costing system upon which the list was founded, this involved a large amount of work in analysing the returns of numerous businesses in various parts of the country, and upon this the relativity of the demand for different articles was founded. The price adjustments are made upon definite lines, and we always give a wholesale price upon which the retail price is founded.

G. D. (8/10).—The chemical trick to which you refer was explained in the *C. & D.*, October 11, p. 552.

S. P. (8/10).—WART CURES.—Many of the cures for warts do not seem to depend upon active principles in the medicament. We suspect this is the case where the application of fresh dandelion juice effected a cure.

C. W. P. (8/10).—CLEANING BOTTLES.—The oily bottles about which you write can be cleaned by boiling in a copper with weak potash or soda solution. Crude potash or caustic soda are used, about one ounce in a copper of five gallons. The bottles are afterwards rinsed in hot water, drained for a day and then heated in a drying closet, usually, for small quantities, a gas oven. On a large scale drying closets heated by waste steam are used.

W. V. (10/10).—EMULSIO OL. MENTH. PIP. (1-64).—We have no formula for this, but one could be devised by shaking the essential oil with diluted tincture of quillaia, but it would need a few experiments to decide what is the best proportion.

W. B. C. (13/10).—WEATHER-GLASS FILLING.—The solution used for filling the tube of a chemical weather-glass is as follows:—

Camphor,			
Ammonium chloride,			
Potassium nitrate ...	...	aa	ʒss.
Rectified spirit ...	...	...	ʒj.
Distilled water ...	...	...	ʒij.

South African (14/10).—ABATING DOG NUISANCE.—The liberal use of powdered ammonium carbonate round the shop door is the best method of abating a nuisance caused by dogs.

D. G. (15/10).—It would be better to obtain the pharmaceutical qualification before emigrating to South Africa or Australia. A two years' experience of pharmacy is not enough to qualify you to fill an assistant's position, but this period of apprenticeship would, we think, be recognised (if properly authenticated) by the Pharmacy Boards in the dominions referred to.

E. D. (20/10).—DANIELL'S CELL.—The dilute sulphuric acid cannot be replaced by zinc sulphate solution as it is the hydrogen resulting from the action of the acid on the zinc that reduces the copper sulphate with the formation of sulphuric acid and metallic copper, and the last-named is deposited on the surface of the copper plate. It is on this account that crystals of copper sulphate are placed in the cell.

Vet. (23/10).—VETERINARY BLISTER can be made from euphorbium, which is not a scheduled poison, but this substance, used in a strength of 6 to 10 per cent. or more, is not much in favour, as it is not very trustworthy. Euphorbium is sometimes combined with cantharides to make a better preparation.

Gum (25/10).—SPIRIT GUM FOR THEATRICAL USE.—The strength of this is usually 1 of resin in 4 or 5 of spirit. A trace of castor oil is added to prevent rapid drying and give suppleness, but some prefer a little Canada balsam, which is of a more sticky nature. This will probably suit your purpose.

G. H. L. (25/10).—COLOURING SPIRIT FLAME.—A green flame can be obtained when spirit is burnt by dissolving boric acid in the spirit. A copper salt (such as the acetate) sufficiently soluble in spirit would also give a green colour to the flame. For a yellow the addition of salt would give the desired effect. Salt is only slightly soluble in spirit but probably sufficiently to give the colour effect. If this is not sufficient the addition of a hydrocarbon such as benzene may be tried. Strontium chlorate, iodide and lactate are more soluble in spirit than the nitrate, and would give a red colour to the flame.

J. H. H. (27/10).—We regret that we are not acquainted with the composition of the liquid employed in the Ozonateur.

S. V. M. (28/10).—(1) LIQUID BLACKING of the Nubian type contains Venice turpentine in addition to shellac, and also a small quantity of castor oil and boiled linseed oil. The formula from the patent specification is given in "Pharmaceutical Formulas." In place of Venice turpentine, thus or Burgundy pitch would probably answer the purpose of imparting viscosity. (2) ETCHING CREAM FOR GLASS.—The liquid used by glass etchers is made by grinding together equal parts of ammonium fluoride and barium sulphate, and thinning this with hydrofluoric acid. The etching cream is left on the glass for twelve hours before it is washed off.

Ideal (28/10).—CLEANING POWDERS not requiring water for use on windows consist of fine quality fossil earth, China clay, or whiting. The powders are elutriated so as to eliminate grains likely to cause scratches on the glass.

J. H. W. (29/10).—AEROPLANE "DOPE."—The varnish used for the linen of aeroplane wings is a solution of cellulose acetate (6.6) in tetrachlorethane (44), carbon tetrachloride (12), acetone (24), alcohol (20). It will probably be necessary to employ the same solvent to dissolve out the varnish from the linen, and it may require prolonged soaking to effect solution. You should first ascertain whether methylated spirit will answer the purpose.

Retrospect of Fifty Years Ago

Reprinted from "The Chemist and Druggist," November 14, 1874.

Pharmacographia

Amongst the literary events of the month must be mentioned the production of a new work called "Pharmacographia," by Professor F. A. Flückiger and Daniel Hanbury, F.R.S. It is, as the name imports, a writing about pharmacy, and includes a history of the principal drugs of vegetable origin met with in Great Britain and British India. The names of the joint authors entitle it to unusual consideration. Mr. Peter Squire likewise publishes the tenth edition of his "Companion to the British Pharmacopœia." The volume is adapted to the latest edition of the official compilation, comparing the strength of its preparations with those of the United States and other foreign pharmacopœias.

THE CHEMIST AND DRUGGIST

COMMERCIAL COMPENDIUM

deals with the trade side of pharmacy

[Commenced *C. & D.*, July 5, 1924]

Bacteriology.—Term commonly applied to the science of micro-organisms; a later, more embracing term of the science would be micro-biology. The micro-organisms commonly dealt with from a pharmaceutical point of view are simple forms of plant life, being unicellular organisms multiplying by fission collectively called Schizophyta, sub-divided into two classes—Schizophyceæ or fission algæ and Schizomycetes, fission fungi commonly called bacteria. It is the importance of bacterial infection in diseases of animals that has led to their study being treated as a separate science (Bacteriology). Bacteria consist of minute cells containing protoplasm without any differentiation into nucleus or plastids. Globular forms are called cocci, rod-shaped are termed bacilli, and spiral forms are called spirilla. The cell wall is chitinous, whereas in most plants it is cellulosic. This character places bacteria on the border-line between animal and plant, approximating nearer to the former. The cell wall may become somewhat gelatinous and prevent the separation of the new entities, when chains and masses are formed, termed streptococci and staphylococci. Their movements vary considerably, some possessing flagella as the means of progression, while others have an appearance of moving, but, the action being molecular, it is termed a Brownian movement. Bacteria in active life increase by splitting; in many cases there is a resting stage, resulting from formation of spores owing to the medium becoming exhausted or drying up. Spores have a comparatively thick wall, which is highly resistant to both heat and cold (*see* sterilisation). Saphrophytes live on dead organic remains; parasitic bacteria on the living organism. The conditions of life of micro-organisms vary considerably. Some live without oxygen and are anœrobic; others require it and are aerobic. A certain amount of warmth is necessary for multiplication, the temperature varying considerably for different forms, some thermophilic bacteria living in hot springs. Culture at various temperatures often enables ready separation of different bacteria; thus most pathogenic organisms grow best at 37° C. (body temperature), while intestinal organisms such as *B. coli* will grow fastest at 42° C. The methods of killing microbes (bacteria) is important (*see* sterilisation), the usual methods being by chemical disinfectants (notably lysol or mercury perchloride where these are permissible) or heat sterilisation (moist heat at 120° C. being more effective than dry heat below 150° C.). Ultra-violet rays (strong sunlight or mercury vapour lamps) also kill microbes subjected to their radiations. Bacteria are responsible for many types of fermentation, familiar examples of which the souring of milk (lactic acid) and the production of vinegar (acetic acid) in the fermentation of alcohol. Bacteria play an all-important part in plant life in bringing soil constituents into suitable condition for absorption: the production of nitrates in the soil is the result of a chain of oxidations by bacteria. The nitrifying organisms in the tubercles on the roots of leguminous plants are able to "fix" atmospheric nitrogen. The treatment of disease with antitoxins is dependent upon the production of these antibodies in blood plasma in response to bacterial infection, diphtheria antitoxin being its most successful application. Vaccination is dependent upon an attenuated (or mild disease-produeing) micro-organism using up some constituent necessary for the propagation of the virulent organism which it protects against (e.g., smallpox). The disease organism itself may be used in a weakened condition (by drying in the case of hydrophobia. The study of bacteriology is exceedingly specialised, and many of its theories are in proeess of modification. Thus hydrogen ion determinations show that organisms show marked variation in tolerance to variation in hydrogen ion concentrations, and that there are bactericidal values. Specialised staining methods and growing under various cultural conditions are used to identify pathogenie organisms. Bacteriology is essentially a practieal study, which can only be gained by actual experience. Classes are available at most of the universities in large centres and at some technical eolleges. Books on the subject are numerous, but teachers usually depend on practical exposition, and text-books are used for reading up various theories. The following is a selection of modern manuals, all of which are adequately illustrated: "A Manual of Bacteriology," by R. T. Hewlett (1921, J. & A. Churchill, 21s.); "Bacteriology for Students," by E. D. and R. E. Buchanan (1922, The Macmillan Co., 12s.); "A Text-Book of Bacteriology," by P. H. Hiss and H. Zinsser (1922, D. Appleton & Co., 35s.); "Practical Bacteriology for Chemical Students," by D. Ellis (1923, Longmans, Green & Co., 4s. 6d.); "Practical Bacteriology, Blood Work and Animal Parasitology," by E. R. Still (1923, H. K. Lewis & Co., Ltd., 21s.).

Bael Fruit.—The fruit of *Ægle Marmelos*, Correa, natural order *Rutaceæ*, is imported from India, the unripe or half-ripe small fruits, dried, from the Deccan, and the large fresh fruits from Bengal. It is ripe in November and December, according to Dymock. The unripe fruit is considered by Hindu physicians to be astringent, digestive and stomachic, and is prescribed in diarrhœa and dysentery. The ripe fruit is considered aromatie, cooling and laxative. As a laxative it is used in the form of a sherbet ("British Medical Journal," 1910, II p. 965). The attention of the medical profession was first called to the drug in the "Lancet" in 1853 (Vol. II, p. 53). In 1868 it was introduced into the Pharmacopœia of India. The dried half-ripe fruit was made official in the B.P. 1885, and the fresh half-ripe fruit in the B.P. 1914. A confection of the fresh fruits has for many years been prepared by Squire & Sons. The botanical name, *Marmelos*, which is Portuguese for quince, is due to the fact that it was described by Gareca d'Ata, physician to the Viceroy of Goa in the sixteenth century, as the Marmelos of Benguala, and has since been known as the Bengal quince. Bél or Bál is the native name in India.

Bakers' Requirements.—The following list includes the chief chemicals, etc., needed in a modern bakery:—

	Used in
Acetic acid	Cake-icing mixtures.
Ammon. ac. phosph.	Acid ingredient in self-raising flour.
Ammon. carb., "vol."	As baking powder for cakes.
Aniline dyes	Colouring purposes. *See C. & D.*, September 20, p. 438.
Bleaching agents ...	Whitening bread. Mostly proprietary articles.
Calcium ac. phosph.	Acid ingredient in self-raising flour.
Cream of tartar ...	Ingredient in baking powder.
Eggs, dried or liquid	Bulk, for pastry.
Flavouring essences...	*See* Confectioners' requirements.
Glucose	As yeast food and sweetener.
Glycerin	In bread that has to be kept an unusual length of time.
Hops	For making "patent" yeast.
Hydrochloric acid ...	In the Dauglish aerated-bread process.
Lime water	For increasing quantity of lime in bread and preventing formation of lactic acid.
Malt, crushed... ...	For making "patent" yeast.
Malt extract	Malted and brown breads.
Mixed spice essence	For Good Friday buns.
Potass. ac. phosph. ...	Acid ingredient in self-raising flour.
Potass. ac. sulph. ...	
Sodii bicarb.	For baking powder.

Care should be taken that the articles supplied are free from arsenic, and in the ealcium acid phosphate the calcium sulphate should be reduced to the minimum.

The C.&D. Commercial Compendium

Bailment.—Goods are said to be bailed when they are delivered by one person to another for some specific object—e.g., lent or pawned, deposited for safe custody, delivered to a carrier for the purpose of being conveyed, or entrusted to a person for the purpose of having some work done. The person who delivers the goods is the bailor; the person to whom delivered the bailee.

Balance-sheet.—Statement drawn up at the end of a trading period showing the assets and liabilities of a business at the date of drawing it up. As a balance-sheet often contains items which are not strictly assets, i.e., unexpired insurance or rent paid in advance, which, being unexhausted revenue expenditure, is carried forward to the next period, and therefore not chargeable in the current profit and loss account—a balance-sheet may also be said to be a summary of debit and credit balances remaining in the ledger after the profit and loss account has been drawn up. A properly drawn up balance-sheet will tell us:—1. The nature and value of the assets and liabilities; 2, the solvency of the business; 3, whether there is overtrading. If the assets exceed the liabilities, the business is solvent; if the reverse, it is insolvent; the question of solvency therefore is that capital must represent the excess of assets over liabilities. Overtrading is seen where debts are contracted (i.e., purchases made) without the means of paying for them, that is, buying out of proportion to sales; this also tests the stability of a business which, although solvent, is not financially sound. Some surplus cash or liquid assets should therefore be available for expenditure. A balance-sheet not being an account, but a statement, does not require the contractions "Dr" and "Cr," or "To" and "By" to appear at the head of it. There is much controversy as to heading a balance "Assets" on the right-hand and "Liabilities" on the left-hand side, as it is seen that some of the items are not actually assets. These headings are, however, substantially correct, and are generally used. The order in which assets and liabilities should appear in a balance-sheet is controversial; some prefer the assets to appear in order of realisability into cash; some in order of permanence of the asset. Therefore, in the first instance, "cash at bank," "bills receivable," "book debts," and other floating assets would appear first, whilst in the second case fixed assets, such as plant, "machinery, furniture, etc.," first. This applies to liabilities such as "bills payable," "creditors," "loans," and "partners' capital" accounts. Some of the assets in a balance-sheet which one expects to see have already been mentioned, and have been stated to be floating assets and fixed assets; the former are held temporarily only for re-sale, and are being constantly turned into cash, whilst the fixed assets are held permanently for the purposes of earning income. Where a sum is paid for goodwill, this value appears in the balance-sheet.. It is an intangible asset; it may remain at its value, increase or decrease by reason of the fluctuations of trade and the progressiveness or otherwise of the business. Goodwill is therefore (as Lord Eldon defined it, "the probability that the old customers will resort to the old place") valuable if the volume of business is kept up. Where the profits permit, goodwill can be written down, or, if this is not actually done, a reserve built up for eventualities; there is no harm done in writing this asset down; a hidden or secret reserve is created in its place. This asset should not be allowed to become inflated as a result of fallen trade, and should be written down against capital account, the accuracy of the balance-sheet being thereby maintained. Stock will appear at its cost or market price, whichever is the lower. If this also is inflated, profits will be stated higher than they really are, with consequent loss to the owner when he subsequently finds they have not been realised, apart from additional burden of income-tax overpaid. On the liabilities side will be stated the capital, if a sole trader, or capital accounts individually of each partner, if a partnership business. At the close of the financial period, drawings during the year may be deducted therefrom, and the apportioned profit added to the capital accounts, or, again, if preferred, the original capital may be left intact and profits transferred to a drawings account, which will also be shown on this side (if kept in credit, i.e., not overdrawn). Following this, sundry trade crditors, bills payable and other liabilities will be shown, and any reserve which has been built up. Provided the assets are not overvalued, it should be stated here that a reserve represents undistributed profits, and when not represented by investments infers that cash remains in the business. Where it is desired to build up a reserve, it would be wise to fund it; in other words, draw the cash out of the business and invest it. Such reserve then becomes a reserve fund, and is represented on the other side of the balance-sheet by investments with consequent income. Depreciation is a factor to be seriously considered, as all assets deteriorate by reason of wear and tear, or obsolescence. This should be watched when preparing the balance-sheet, the amount of the depreciation being charged in the profit and loss account and shown deducted from the present value of the asset. To sum up, a balance-sheet is given setting forth the matter referred to, with the assets and liabilities shown in their positions:—

Liabilities	£ s. d.	*Assets*	£ s. d.
Capital (at beginning of year)		Plant and Machinery ..	
Less Drawings ..		*Less* Depreciation	
Add Profit per profit and loss a/c		Furniture, Fixtures, etc.	
(= Capital at end of year)		*Less* Depreciation ..	
(or original capital kept intact as stated) ..		Goodwill	
Sundry Creditors ..		Sundry Debtors ..	
Bills Payable		*Less* Reserve for Bad and Doubtful Debts	
Loan Account		Stock in Trade ..	
Reserve Fund ..		Investments	
		Cash at Bank	
		Cash in Hand ..	

Balata.—This product, closely resembling gutta percha, is obtained chiefly from British, French and Dutch Guiana and Brazil, and is yielded by two or more trees of the natural order *Sapotaceæ*. Several trees said to yield it have received the name of balata—e.g., *Achras Balata*, Aubl; *Mimusops Balata*, Gaertu; and *Mimusops Balata*, Crueg; but these are all now referred to two species, e.g., *Achras Sapota*, Linn., and *Mimusops globosa*, Gaertu. But it is probably derived from other species also, since in French Guiana a tree with oval fruits, with a reddish milk, gives the *Balata* rouge, and several other trees are said to be called *Balata* in Guiana and the Antilles. In many of its properties it is intermediate between india rubber and gutta percha, possessing the elasticity of the former and the ductility of the latter. A piece ½ in. square can be stretched into a thread 10 ft. long. Heated to 120° F., it softens, and may be welded, although it does not melt until 270° F. It is quite soluble in benzol and carbon disulphide in the cold, and in turpentine, chloroform, and petroleum, when heated. It is not acted on by caustic alkalis nor by hydrochloric acid, but is by concentrated sulphuric and nitric acids. It vulcanises readily. It was introduced in 1860 as a substitute for india rubber and used for insulating telegraph wires, but when attention was directed to it in America as a masticatory its consumption quickly increased for the manufacture of chewing gum, a use which it shares with the chicle gum of Mexico and Yucatan, which is derived from *Achras Sapota*, Linn., one of the trees which yield *Balata* in Guiana. The *Balata* of Dutch and British Guiana, examined by A. Tschirch and E. Shereschewski, was found to contain 41.5 per cent. of resinous matter soluble in alcohol and 45.3 per cent. of gutta percha soluble in chloroform. (*See* "Year-Book of Pharmacy," 1906, p. 13.)

These columns show the phenomenal growth of the sales of

HOWARDS'

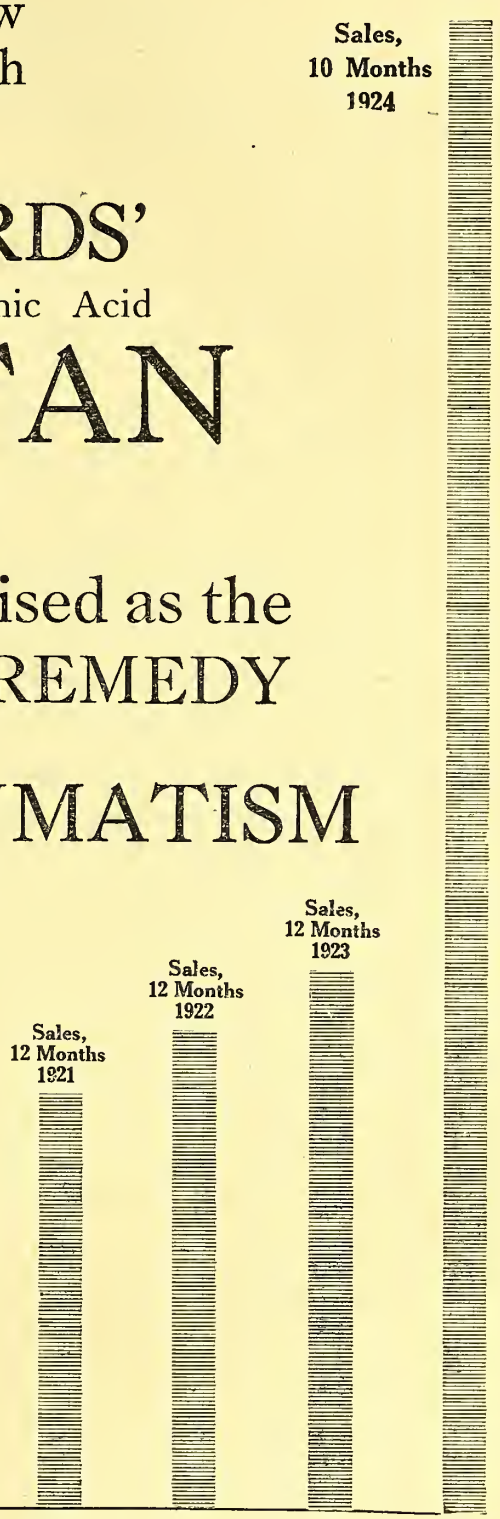
Phenyl Cinchoninic Acid

AGOTAN

BRAND

which is recognised as the STANDARD REMEDY *for* GOUT, RHEUMATISM

and kindred ailments due to excess of URIC ACID



1 oz. bottles of Powder.

25, 50 & 100 per bottle, TABLETS

HOWARDS & SONS, LTD. (Estd. 1797), Ilford, London.

ALKALOIDS

Fine Chemicals Opium Derivatives

SALICIN
CAPSICIN
CANTHARIDIN
PODOPHYLLIN
HYOSCYAMINE
HOMATROPINE
JALAP RESIN
IRIDIN
ALOIN
GINGERINE
LITHIA SALTS
SCAMMONY RESIN

MORPHINE
CODEINE
STRYCHNINE
CAFFEINE
EMETINE
THEOBROMINE
CHLOROFORM

OPIUM
TELA VESICATORIA
VERATRINE
ATROPINE
CHRYSAROBIN
DIAMORPHINE
EMETINE
BISMUTH IODID.
EMP. CANTH. LIQ.
ETHYL MORPHINE HYDROCHLOR.
ERGOTIN

T. & H. SMITH LTD

BLANDFIELD WORKS: EDINBURGH. : 25 CHRISTOPHER STREET, LONDON, E.C.2. : 32 & 34 VIRGINIA STREET GLASGOW.

IRISH MOSS

SPOT AND FORWARD

BARKS—Cascara, Elm, Sassafras, Wild Cherry.
FLOWERS—Camomile, Elder, Lavender, Poppy.
LEAVES & HERBS — Bay, Belladonna, Digitalis, Henna, Horehound, Lobelia, Mint, Peppermint, Sage, Senna, Thyme.
ROOTS—Aconite, Angelica, Dandelion, Gentian, Hellebore, Licorice, Mandrake, Orris, Rhapontica, Senega, Squill, Turmeric.
SEEDS—Celery, Cummin, Anise, Fennel, Quince.
VARIOUS—Cassia Fistula, Ergot, Farina, Insect Powder, Licorice Juice, Orange Peel, Juniper Berries.

HORACE BATTIN & CO. Ltd.
PORT OF LONDON BUILDING
SEETHING LANE, LONDON, E.C.3.
Telephone: Royal 4651/2. Telegrams: "Hobatco, Phone, London."

Lin Camph, B.P.
Finest Cream Olive Oil
and all
Pharmaceutical Preparations

JOSEPH BROOKS & CO., LTD.,
Wholesale Druggists,
42 SHUDEHILL - - MANCHESTER

For WHOLE & POWDERED DRUGS, GUMS, SEEDS, ESSENTIAL OILS, &c.

L. A. Horner & Sons

12 SOUTH TENTER STREET - - LONDON, E.1

WRITE FOR OUR COMPREHENSIVE LIST OF 7lb. QUANTITIES AND UPWARDS.

JOHNSONS FINSBURY LONDON

CHEMICALS

FOR PHARMACY, TECHNOLOGY AND PHOTOGRAPHY

For immediate delivery

ACID ACETIC GLAC. B.P.
ACID GALLIC B.P.C.
ACID PYROGALLIC
ASPIRIN
BARBITONE
BROMIDES
GUAIACOL CARBONATE
HEXAMINE
HYDROKINONE
METHYL SALICYLATE
METHYL SULPHONAL
PHENACETIN
PHENOLPHTHALEIN
POTASS. PERMANGANATE
SULPHONAL
SODIUM BARBITONE

We solicit enquiries for all Pharmaceutical and General Chemicals.

JOHNSON & SONS

Manufacturing Chemists, Ltd.

23 CROSS STREET, FINSBURY, E.C.2.

MANCHESTER OFFICE - - - 12 QUEEN STREET, DEANSGATE

PRECIPITATED CRETA PRÆCIP. CHALK.

"Sturge's Chalk."

Lightest on the Market.

All grades from the LIGHTEST to VERY DENSE.

MANUFACTURED BY

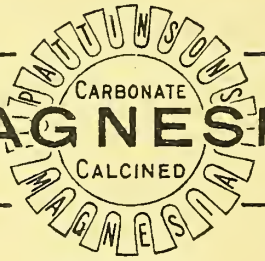
JOHN & E. STURGE, LTD., 18 Wheeleys Lane, BIRMINGHAM.

Agents:
H. J. BAKER & BRO., 81 Fulton Street, NEW YORK.
G. REINBOLD & CIE, 63 Rue des Archives, PARIS.

Also Manufacturers of—

CITRIC ACID, BICARBONATE OF POTASH, ROCHELLE SALTS and Pulv. SEIDLITZ, FLUID MAGNESIA, and "CITRATE OF MAGNESIA" & other Effervescent Saline Preparations.

Telegrams: "Sturgeon Birmingham."

Trade 

Mark

TRADE MARK

PATTINSON'S

MAGNESIA

Carbonate, Calcined, Fluid.

The Washington Chemical Co., Lim.,
Washington, Co. Durham, England.

Telegrams: "Chemical, Washington Station." Telephone: 3788 Central, Newcastle-on-Tyne.

CRESCENT
Trade BM&C° Mark
BRAND

SODA ASH
Guaranteed 58°—98/99% Sodium Carbonate

CAUSTIC SODA
Solid: 76/77°, 70/72°, 60/62°. Flake: 76/77°

BICARBONATE OF SODA
Guaranteed to conform to the requirements of the B.P. Essential Ingredient of all Effervescent Salines

SILICATE OF SODA
Water-white—for Egg Preserving

PURE SODA CRYSTALS
(Washing Soda, Pea and Bean size Crystals)

CARBONATE OF AMMONIA (Lump and Powder)
Guaranteed to conform to the standard of the B.P.

BRUNNER, MOND & CO., Limited
NORTHWICH, CHESHIRE
No. 13 LONDON SALES OFFICE - - 7 CAVENDISH SQUARE, W.1 L H A

BDC
Trade Mark.

No. 1.

Avvalin, Bridycor, Glauramine, Photofor, Therafor

This space during the next few months will contain details of the various specialised products, manufactured under the above registered brand names, by British Dyestuffs Corporation, Ltd., including :—

MICROSCOPIC STAINS,
INDICATORS,
PHOTOGRAPHIC DYESTUFFS,
MEDICINAL PRODUCTS,
FINE ORGANIC CHEMICALS, etc.

Write for information and prices to :—

BRITISH DYESTUFFS CORPORATION, LTD.
70 SPRING GARDENS, MANCHESTER.

Branch Works :—
BRADFORD.

Telephone : LUTON 891
Telegrams : LAPORTE,
Codes : MARCONI, A.B.C. 5th, BENTLEY'S.

B. LAPORTE LTD.

CHEMICAL MANUFACTURERS,
LUTON.

HYDROGEN PEROXIDE

HYPOCHLORITE of SODA
HYPOSULPHITE of SODA
PERBORATE of SODA
OXALIC ACID
SULPHITE of SODA
BARIUM SALTS
SAL-ACETOS POWDER
ACID PYROPHOSPHATE OF SODA

ACIDS

(pure and commercial).

Sulphuric, Hydrochloric, Nitric, Lactic, Oxalic, Perchloric (puriss), Tartaric, Citric.

MEDICINAL AND FINE CHEMICALS

Hydrogen Peroxide (100 vols.), Alkaloids, Saccharine, Mercurial Salts, etc., etc.

CRUDE DRUGS AND BOTANICALS

Roots, Herbs, Leaves, Barks, etc.

TAS.284a

Advertising economics

THE fallacy is often urged against large advertisers that their advertising is paid for by the customer. In point of fact, the large advertiser, by greatly increasing demand, is enabled to run his whole organisation on more comprehensive, more economic lines. *It always pays to ask Berk.*

Telephone Ave. 9362. Ask Berk Telegrams Berk, London

F.W.BERK & CO.LTD
Acid & Chemical Manufacturers since 1870.
1 FENCHURCH AVENUE. LONDON. E.C.3
WORKS AT STRATFORD. E. & MORRISTON. GLAM

GRAND PRIZES:
FRANCO-BRITISH EXHIBITION.
JAPAN-BRITISH EXHIBITION.

GOLD MEDALS:
SYDNEY. MELBOURNE.
CALCUTTA.

FINE CHEMICALS

ATROPINE
BROMIDES
CAFFEINE
CAMPHOR
CLOVE OIL
EMETINE
IODIDES
NICOTINE
QUININE
SALICIN
STRYCHNINE
VERMILION

WHIFFEN & SONS LTD.
INCORPORATING
GEORGE ATKINSON & CO.
BATTERSEA AND FULHAM
LONDON, S.W.

Lombard Road,
Battersea,
London,
S.W.11.

Carnwath Road,
Fulham,
London, S.W.6.

ALL CLASSES OF
DRUG GRINDING
LOWEST COMPETITIVE QUOTATIONS

Telegrams:
"Whiffen, London."
"Camphor, Walgreen, London."
Telephones:
Battersea 1234 (3 lines).
Putney 3385.

The British Pharmacopœia specifies

that BORAX must not contain ARSENIC in excess of five parts per million.

COMMERCIAL BORAX may fail to comply with this standard, and is therefore unsuitable for Pharmaceutical purposes.

Secure the protection of our guarantee by ordering through your suppliers.

REGD. TRADE **"TWENTY MULE TEAM"** MARK

BORAX B.P. Quality

CRYSTAL POWDER,

Guaranteed to comply with the requirements of the British Pharmacopœia.

BORAX CONSOLIDATED LTD., 16 Eastcheap, London, E.C. 3.

TABLETS *PACKED or BULK*

COMPRESSED

"PINE"

CHEST & LUNG LOZENGES

Let us quote you :

BUCKLEY-BOWKER TABLET CO.

4 Arthur Street, LONDON, E.C.4

OPIUM

Natural and in Powder.

J. TARANTO & FILS, SMYRNA

ESTABLISHED 1868. (Turkey in Asia)

Telegraphic Address : AFION, SMYRNA.
Codes : A.B.C. 5th and 6th Editions. BENTLEY'S.

Correspondence :
English, French, German, Italian, Spanish, etc.

IF YOU DO NOT STOCK **RED BAND MAGNESIA**—you are disappointing a customer.

If you do not push **RED BAND MAGNESIA**—you are disappointing your banker.

If you are keen on good lines—you will write us for samples. **RED BAND** is *the line.*

IN THREE SIZES:

Bonus one dozen to each gross	Retail prices ..	4½d.	7½d.	1/3	Bonus one dozen to each gross
	Cost you ...	30/-	50/-	90/- per gross	

RED BAND CHEMICAL CO. Richmond Terrace EDINBURGH.

WE ARE
IMPORTERS

OF
BARKS HERBS
LEAVES ROOTS
FROM
AMERICA
INDIA
AND
MEXICO

GUMS
BALSAMS
TOLU
AND
CANADA

TELEPHONE:
ROYAL 2777, 2778, 2652.

WHEELER & HUISKING
LIMITED,
9 GREAT TOWER STREET
LONDON, E.C.3.

CHAULMOOGRA OIL
TARAKTOGENOS AND
HYDNOCARPUS
CHALK PRECIPITATE
DENSE. ENGLISH.

WE ARE EXPORTERS OF
CHEMICALS.
OFFERS INVITED.

OF
ESSENTIAL OILS
FROM
AMERICA
MEXICO
AND
HOLLAND

SEEDS
COCOA BUTTER
SAPONINE
EXT. FELIC. MARIS
EXT. WITCH HAZEL
ETC.

TELEGRAMS:
"ASAFETIDA, LONDON."

NEW YORK CORRESPONDENTS:—
CHAS. L. HUISKING, INC., 5, PLATT STREET.

EPSOM SALTS. Commercial and B.P. Qualities also Powdered.
GLAUBER'S SALT. Commercial and B.P. Qualities & Desiccated.
ZINC SULPHATE. Commercial and B.P. Qualities.
ZINC CHLORIDE. Fused Granulated and Liquid.
BARIUM CHLORIDE.
HYPOSULPHITE OF SODA. Pea Crystals.
LEAD ARSENATE. Paste and Powder.
PRECIPITATED SULPHUR.
A List of our general Technical Chemicals will be sent on application.

WILLIAM
BLYTHE
& CO.
LIMITED
HOLLAND BANK
CHEMICAL WORKS
CHURCH
LANCASHIRE.

GALENICALS
from Chemically and Physiologically tested Drugs
WILLOWS, FRANCIS, BUTLER & THOMPSON, LIMITED
40 Aldersgate Street, London, E.C. 1.

ALL KINDS OF FINEST QUALITY

LOZENGES, PASTILLES & LIQUORICE GOODS

ARE NOW BEING OFFERED AT

REMARKABLY LOW PRICES

SAMPLES AND QUOTATIONS GLADLY SENT UPON REQUEST.

ALL OUR LOZENGES are HAND-MADE, NOT COMPRESSED.

GEORGE RATCLIFFE

Potterdale Mills, Dewsbury Road, LEEDS.

ESTABLISHED OVER 40 YEARS.

SAPONINE POWDER (SOLUBLE)
CREAM OF TARTAR 99/100% B.Ph.
TARTARIC AND CITRIC ACIDS B.P.
AMYL ACETATE, GINGERINE, CAPSICINE

Finest Essential Oil Lemon

We have large quantities for sale and are quoting particularly favourable prices.

C. W. FIELD, LTD.

92 WOOD STREET - - LIVERPOOL.

MAKERS OF——————

GUARANTEED

PURE MENTHOL CONES

Samples and Prices on Application
- - Wholesale only - -

MYCROMET MANUFACTURING CO.

Clydesdale Street Works, OLDHAM

SAMUEL LAMBERT & CO., LTD.

CRUDE DRUGS | 10 GREAT ST. HELEN'S LONDON - - E.C.3 (Telephone: Avenue 1694.) | ESSENTIAL OILS

Pyrogallic Acid Gallic Acid

Manufactured by J. L. ROSE, Ltd.
At ABBEY ROAD, BARKING, LONDON, E.
Wholesale and Export only.

S. N. DE., M.Sc. (Botany), B.Sc. (Geology)
P.O. Box 7851,
CALCUTTA.

HYDNOCARPUS OIL
CHAULMOOGRA OIL, KAMALA
ALL INDIAN DRUGS.

Agents:
Wheeler & Huisking, Ltd.
9 Great Tower St. London, E.C.3
Telephone: Royal 2777.

SOLAZZI *The Chemist's Brand* **LIQUORICE JUICE**

SOLAZZI JUICE IS GUARANTEED TO CONSIST ENTIRELY OF THE CONDENSED EXTRACT OF FINEST CALABRIAN LICORICE ROOT **WITHOUT ANY ADMIXTURE WHATEVER**

Should any enquiry as to the composition of SOLAZZI be received from the public, Chemists are asked to emphasise the fact that SOLAZZI is not included in the category of Secret Remedies, and that the accompanying guarantee obtains with every parcel.

A NEW THERAPEUTIC PRODUCT
FOR
ASTHMA

Now extensively brought to the notice of the Medical Profession throughout the United Kingdom

Asthmolysin

(Suprarenal—Pituitary Compound.)

The treatment is by Hypodermic Injection and has proved effective in cases resistant to all other medication.

Hundreds of samples have been distributed to Medical men who are already enquiring for sources of supply.

Issued in Ampoules containing 1c.c. in boxes of 10.

Price **10/-** per box.

Your Profit: **25%** on turnover, **33⅓%** on cost.

Order through your wholesaler. Urgent supplies sent direct on request by 'Phone, Wire or Post.

Verbum Sapienti Sat Est.

Full literature from the British Empire Importers:

CHAS. ZIMMERMANN & CO. (Chemicals), Ltd.

Medical Department - **9/10 St. Mary-at-Hill, London, E.C.3**

Telegrams: "Acidolan, Bilgate, London." Tel.: Royal 1866, Extension 5.

Confellax

For Constipation

This delicate laxative has an attractive appearance and agreeable taste and is particularly suitable for children and invalids.

REVISED PRICES (P.A.T.A.)

	Retail	Wholesale	
IN JARS	1/6	12/- doz.	£3 Orders Carriage Paid.
	2/3	18/- ,,	Handsome Showcards.
	3/6	28/- ,,	

Free Samples for your local doctors and nurses.

EVANS, GADD & CO. Ltd., BRISTOL & EXETER

Wholesale and Manufacturing Chemists

SOUTH AFRICA

Branches in all Important Towns.

LENNON LIMITED

WHOLESALE AND RETAIL

CHEMISTS AND DRUGGISTS

Druggists' Sundriesmen. Dealers in Surgical Instruments, Dental, Optical, and Photographic Goods, Perfumery, and Assay and Mining Requisites. Contractors to Hospitals and Public Institutions.

AGENCIES UNDERTAKEN

London Office:

12-14 LAFONE ST., LONDON, S.E.1

PYRIDINE **CHINOLIN**
PICOLIN **CHINALDIN**
LEPIDIN
PURUM AND PURISSIMUN.
NIKOTIN 95%
TOBACCO EXTRACT
DELIVERS.

SONTHEIMER & CO.
CHEMICAL WORKS,
ALTONA/ELBE, CAROLINENSTR. 39
Telegraphic Address—"URTEER."

Theobromine Pure Alkaloid 9/5 lb.
Theobromine Sod. Salicylate 6/2 lb.
Caffeine Pure Alkaloid - 9/4 lb.
c.i.f. London.

Societeit voor Chemische Industrie
"Katwijk," Katwijk on Sea, HOLLAND.
Agent: **ED. GREYER, Bush Lane House, London, E.C.4.**

Quotations from Chemists: No. 1

"During the twenty years of my pharmacy experience I have sold thousands of packages of Antiphlogistine and I have never heard of a customer who was dissatisfied with the preparation. On the other hand, many who bought Antiphlogistine on my recommendation have returned to express their appreciation and gratitude."

THE DENVER CHEMICAL MFG. CO.
41, ST. ANN'S ROAD - - LONDON, E.3.

ERGOAPIOL (Smith) PROTECTIVE MARK

Patented in U.S. and Foreign Countries.

Ergoapiol (Smith) is now identified by the letters M.H.S. in the gelatin on the inside of each capsule. These letters are not visible from the outside, but they are plainly discernible in the gelatin when the capsule is cut in half.

MARTIN H. SMITH CO. NEW YORK, N.Y.

British Agents—
THOS. CHRISTY & CO., 4-12 Old Swan Lane, London, E.C.4.

GARFIELD TEA

PROMPT SHIPMENT
ALL SIZES

Phone or Write :

GARFIELD TEA CO.
44 Foxbourne Road
BALHAM, LONDON, S.W.17.

Himrod's ASTHMA CURE

Established 50 years

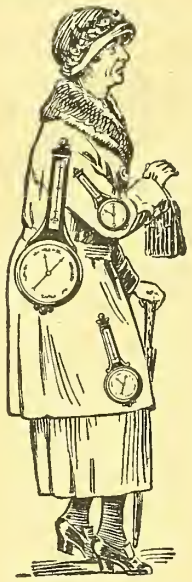
IT is a powder to be burned and the fumes inhaled without any bad after-effects. Recommended by physicians throughout the world.

"I have tried every remedy ever invented, and 'Himrod's Cure' is the only one in which I have absolute confidence."—EMILY FAITHFUL.

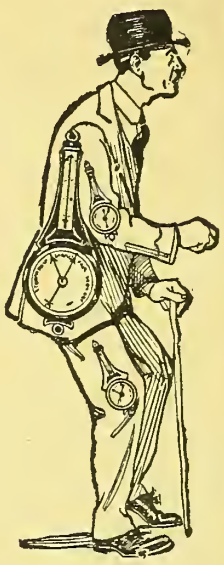
"This is an excellent remedy for Asthma."—Sir MORELL MACKENZIE (in his Clinical Lecture at the London Hospital and Medical College).

"The only relief I could get; if I had only known of it before."—LORD BEACONSFIELD, in his dying moments.

Himrod Manufacturing Company
SOLE PROPRIETORS,
270 WASHINGTON STREET,
JERSEY CITY, N.J., U.S.A.



CURICONES



The Wonderful Seller for

Rheumatoid Arthritis, Gout, Neuritis, Rheumatism, Lumbago and Sciatica.

Well advertised. Recommended by Doctors.
Quick Sales. :: :: Generous Terms.

Stocked by ALL Wholesale Houses.

Other lines :—
ARTHROIDS BALM, CURILAX, VICAPS,
STEMAT ANTI-CATARRHAL TABLETS,
STEMAT ANTI-CATARRHAL BALM,
My Lady's ROLETTE WRINKLE ERADICATOR,
THE QUROPAD MASSAGE APPLIANCE,
SANALVE, VANITY BOXES, Etc., Etc.

Write for particulars of **Cash** Bonus for Window Display.

STEPHEN MATTHEWS & Co. Ltd.

Manufacturing Chemists

19-20-21 FARRINGDON ST., LONDON, E.C.4.

Telephone: City 8342. Telegraphic Address: "Curicones, Cent, London."

REVELATION IN ELECTRIC TREATMENT

Show the "Sanawaves" Electro Galvanic Apparatus in your window. The treatment, based on weak galvanic currents, cures **rheumatism, neuritis, arthritis** and other affections of the nervous system. Can be used by sufferers themselves in their own homes without any danger.

The Sanawaves Apparatus with general electrodes

Special Electrodes include :

Abdominal
Ear
Eye
Laryngeal
Kidney
Knee & Arm
Massage Roll
Palate
Special Plate
Wrinkle Remover
Brushes
Comb
etc., etc.

Write for descriptive Booklet.

For Trade Terms apply to :

The British Wolmuth "Sanawaves" Co., Ltd.
27, SOHO SQUARE - - LONDON, W.1.

WILLIAM HILL & CO.

TRAVEL

SCOTLAND

FOR

PROPRIETARIES

136 RENFIELD STREET, GLASGOW, C.2

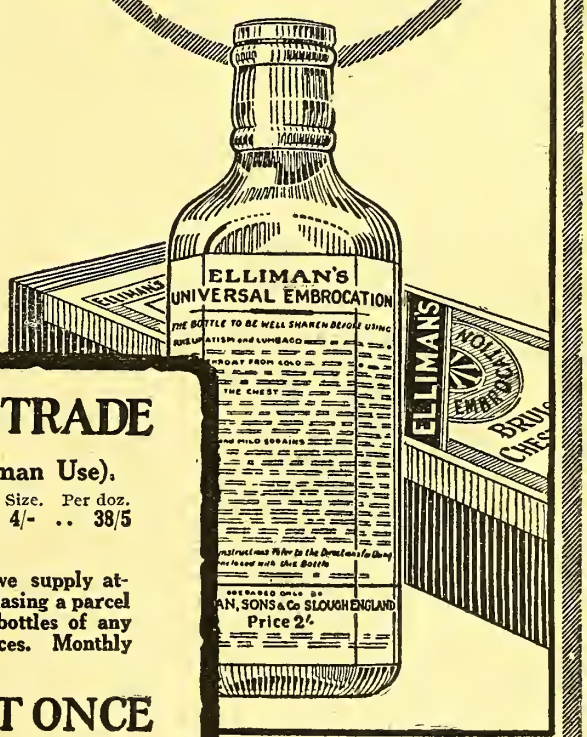
ELLIMAN'S *is* BACK AGAIN!

Now Yielding 31⅔% CLEAR PROFIT

Including 5% Window Display Discount

The old dispute is now happily settled—and the most popular Embrocation ever known now comes into its own again. "Elliman's" is on the P.A.T.A. and earns you 31⅔% profit on its cost. This profit includes the 5% special discount offered in consideration of a window display for which we provide attractive matter. A big advertising campaign has been launched, and in a few days' time everyone in the country will know that their old friend Elliman's is back again, and that all good chemists and other stores stock it. Place your order now.

The BEST SELLER YOU EVER HAD NOW ON MOST GENEROUS TERMS



ELLIMAN'S TERMS *to the* TRADE

UNIVERSAL EMBROCATION (For Human Use).

	Size.	Per doz.		Size.	Per doz.
UNIVERSAL	2/-	.. 19/2	UNIVERSAL	4/-	.. 38/5

CARRIAGE PAID TO DESTINATION.

In consideration of a window display, for which we supply attractive material free of charge, retailers upon purchasing a parcel to the value of £5 or over, or not less than six dozen bottles of any size, will be allowed 5% discount on the above prices. Monthly settlements.

PLACE *YOUR* ORDER AT ONCE

WHOLESALE AND EXPORT ONLY

JOHN TYE & SON

457 CALEDONIAN ROAD, N.7

UNBREAKABLE

EMPTY GELATIN CAPSULES

All sizes from M.30 to 1½ oz., in any colour.

Soluble for VETERINARY PURPOSES and SPECIALLY TOUGHENED for packing Lozenges, Pills, Tablets, Powders, etc.

ENQUIRIES INVITED

MEDICINAL GELATIN CAPSULES. GLASS CAPSULES. AMBER AND WHITE AMPOULES. IODINE AMPOULES. AMYL NITRITE CAPSULES.

SYRUP

ROBORANS

(ROBERTS)

Recognised by the Medical Profession as

THE BEST TONIC.

Supplied in 8-oz. and 16-oz. Bottles by all the Wholesale Houses.

Inquiries Invited for

NEW & RARE MEDICINES

of French, Italian and Russian Origin.

ROBERTS & CO.,

76 New Bond Street, London, W.

5 Rue de la Paix, Paris.

Reasons why you should stock

RANKIN'S

Head Ointment

Mothers find it unequalled for keeping the children's hair in a clean and healthy condition.

It instantly kills all nits and vermin in the hair and is pleasant in use.

It is well known and widely advertised amongst your customers, and it is no trouble to handle.

It pays YOU handsomely.

Write to-day for trade terms, price lists, etc., to

RANKIN&Co., KILMARNOCK

ESTABLISHED 100 YEARS. ON P.A.T.A. LIST.

PROFITS ON PROPRIETARIES

When checking the next invoices from your wholesaler will you please notice the percentage of profit that you make on Proprietaries.

You will see that it goes as low as 8⅓% ! !

Needless to say, articles showing such a low profit are not paying their share towards expenses and probably the stocking or sale of them will not be encouraged.

For many years we have persistently advertised the profit to be made on

"QUINPHOS" (REGD.)

THE GREAT TONIC

and for many years we have persistently advertised **Quinphos** in the Press and on the hoardings.

There is no effort required therefore in selling **Quinphos,** and yet for a small display and a small order we give 36%. Therefore we never mind talking about

PROFITS ON PROPRIETARIES

This is Bonus order No. 2 :—

The PROFIT is **36%** on SELLING PRICE and **56%** ON COST

		£ s. d.	Sells for £ s. d.
3 doz. 1/3 "QUINPHOS"	@ 11/6	1 14 6	2 5 0
1 „ 3/- „	@ 27/6	1 7 6	1 16 0
¾ „ 1/3 „	Bonus		11 3
		£3 2 0	£4 12 3
5% 1 month		3 2	
		£2 18 10	

Outlay £2.18.10 Profit £1.13.5

Advertising Matter for Window Display included.

Sole Makers :

THOMPSON & CAPPER LTD., MANESTY BLDGS., COLLEGE LANE, LIVERPOOL

The most successful iron tonic on the market.

COLLOSOL FERROMALT

(Crookes).

Daily increasing in popularity among both doctors and the public, this should have your personal support.

Collosol Ferromalt is now supplied in an attractive packing, admirably adapted for counter display, and is the subject of vigorous and continuous propaganda among the medical profession.

Collosol Ferromalt gives a satisfactory margin, and the assurance of complete satisfaction to your client.

Terms and particulars from

THE CROOKES LABORATORIES
(British Colloids, Ltd.)
22 Chenies Street, Tottenham Court Road, London, W.C.1

Telegrams:
"Colossally, Westcent, London."
Telephones:
Museum 3663-3697.

CORYTONS

Riedel's (J. D. Riedel, A.G.)

Pharmaceutical Preparations

Are World Renowned.

THIOL, dry and liquid, GONOSAN, NEO-BORNYVAL, etc. etc.

Sole British Agents:

W. DEDERICH, LTD.
Imperial Buildings, Ludgate Circus, E.C.4

Dr. BENGUE'S BALSAM

RHEUMATISM, NEURALGIA, GOUT.

PULMO (BAILLY).—Dr. BENGUE'S DRAGÉES.
FORXOL.—HEMOSTYL.—EUPURGO.
Dr. BENGUÉ'S ETHYLCHLORIDE.
RICARD-CACHETS (Free sample on application).
ANESTILE. **NARCOTILE.**
EUPHORIAN AMPOULES (Entero-Antigens)

WRITE FOR SPECIAL TERMS — Dr. BENGUÉ & CO., MFG. CHEMISTS, 52, CHARLOTTE ST., LONDON, W. 1.

CACHETS "FINOT"

(White or Coloured)
With inscriptions in any desired tint; also Plain or Embossed.
"A distinction all their own."—*C. & D.*
"Perfection of Cachets."—*Lancet.*
These Cachets are especially adapted for Headache, Neuralgia and other powders.
COOPER SON & CO. LTD., 80 Gloucester Road, SOUTH KENSINGTON.
In 17 Sizes to fit the various types of Cachet Machines.

Registered Trade Mark

PRUNOL PRUNE JELLY

A safe, simple aperient for children or adults. Consists of Prunes, Demerara Sugar, Senna and Ginger. Universally approved by the Medical Profession. Now being widely advertised. Be ready to meet the demand. Order stock from your Wholesaler. 25% Profit at M.R.P. Retails 1/10 P.A.T.A.

PRUNOL LIMITED
4 Pickering Place, London, S.W.1.

BESORBON

(Dr. Hill's Formula)

MEDICINAL SNUFF. ABSOLUTELY THE FINEST REMEDY FOR CATARRH & COLD IN THE HEAD.

Richard Dickeson & Co. *(Incorporated with Reynolds, Sons & Co., Ltd.)* **57-59 CHARTERHOUSE STREET, LONDON, E.C.1.**

Build Your Business on SOUND LINES

Maintaining the Vitamin Content

FAT-soluble A vitamin is an all-important factor in the therapeutic efficiency of cod-liver oil. It follows that the more completely this vitamin is guarded against deterioration in any preparation containing cod-liver oil, the better the resultant product will be.

Recognition of this fact led to steps being taken to prevent undue oxidation —and consequent destruction—of the vitamin in the P., D. & Co. Cod-Liver Oil Emulsion, during manufacture. These measures also preclude the rank, repulsive taste which develops when cod-liver oil has become oxidised to any extent.

As an example of precautions adopted may be instanced the extreme care taken to eliminate so far as possible the presence of air during manufacture and packing.

Still another precaution is the destruction of oxydases in the emulsifying agents before they are used. Of interest in this connection is an article in *The Chemist & Druggist* of September 27th (page 444).

Every other practicable means is also taken to preserve, in an active condition, the whole of vitamin A in the P., D. & Co. Emulsion.

The oil used is the best of the Norwegian varieties, passed for use only after its quality has been approved in the P., D. & Co. Analytical Department. Its vitamin content is of the highest.

The perfect emulsification of the oil, and its consequent inseparability, are secured by working to a definite standard, comparison being made by microscopic examinations of the finished product.

You can show, recommend and sell P., D. & Co. Cod-Liver Oil Emulsion with confidence. It will always justify your recommendations. It is prescribed by physicians.

Our terms are worth investigating.

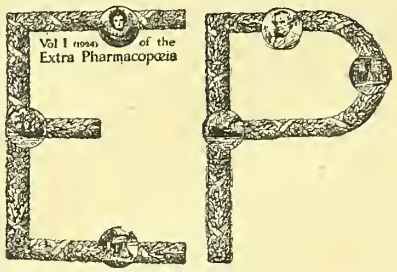
33 per cent.

Cod-Liver Oil Emulsion

Parke, Davis & Company

	5 *oz.*	8 *oz.*	16 *oz.*
M.R.P.	... 1/8	... 2/6	... 4/6 each
M.W.P.	... 14/2	... 20/8	... 36/9 net per doz.

PARKE, DAVIS & COMPANY, 50-54 BEAK STREET, LONDON, W.1.



Vol. I (1924) of the

Extra Pharmacopoeia

(1163 plus xxxviii pp.)

By MARTINDALE & WESTCOTT,

is now ready, 27/6 *net; post free,* 28/-

Contains new and concise information on the following: "ACTIVATED" ALKALOIDS, ASPIRIN COMPOUNDS, BISMUTH INJECTIONS FOR SYPHILIS, COLLOIDAL METALS, EMETINE AND COMPOUNDS, ACCESSORY FOOD FACTORS, CHAULMOOGRA PREPARATIONS, INSULIN, NON-IONISABLE MERCURIALS, QUINIDINE AND CINCHONIDINE, VACCINES, ORGANOTHERAPY, INTRAVENOUS TREATMENT, DANGEROUS DRUGS ACTS INSTRUCTIONS.

LONDON: H. K. Lewis & Co. Ltd., 136 Gower St., W.C.1; & W. Martindale, 10 New Cavendish St., W.1.

1/6 and 2/6, and 7lb. Tins at P.A.T.A. Terms.

Obtainable through the wholesale trade, or apply for special agency terms to—
JOHNSTON & ADAMS, DUNDEE.

SLIPPERINE
REGISTERED

For Status Inquiries, Collection of Accounts, and Investigations, Business Transfers, Stocktaking and Valuations,

Join The Association of Manufacturing Chemists, Ltd.

which is **THE MEDIUM** for the **TRADE.**

PROSPECTUS ON APPLICATION.

PARKIN S. BOOTH,
Accountant to the Association of Manufacturing Chemists, Ltd.
(for the Protection of the Drug, Chemical and Allied Trades)
26/28 KIMBERLEY HOUSE, HOLBORN VIADUCT, E.C.
Telephone: City 6942.
Or 35, 36 & 37 EXCHANGE CHAMBERS,
2 BIXTETH ST., LIVERPOOL. *Telephone: Central 4330 (4 lines).*

Alcohol for Industrial Purposes

Duty-Free Spirit.

The Industrial Spirit Supply Company, Limited.
Agents: HONEYWILL BROS., Ltd., 79 MARK LANE, LONDON, E.C.3.

BOOKS FOR PHARMACISTS.

Send us a postal order and we will send you a 32 page catalogue of professional and business books for pharmacists, and a copy of

"THE SPATULA"

an illustrated monthly magazine for druggists, full of American snap and enterprise.

The SPATULA, BOSTON 14, MASS., U.S.A.

Dr. Stedman's Teething Powders

For retailing loose: **240** powders for **11/-**. 5% off £5 worth. Through your wholesale house.
P.A.T.A. terms.

125 NEW NORTH ROAD, LONDON, N.1.

HOW would your business fare in the event of Accident or Sickness causing you to be temporarily disabled, and consequently leaving it devoid of your supervision?

A PERSONAL ACCIDENT AND SICKNESS POLICY

is the only safeguard against financial loss in such circumstances. Therefore, write to-day for particulars to

THE LICENSES AND GENERAL INSURANCE CO., LTD.
24, 26 & 28 MOORGATE, LONDON, E.C.2

Established 1890. **RATES FROM £1 UPWARDS.** Funds exceed £600,000.

SHOPFITTING CONTRACTORS

FREDK. SAGE & Co., LTD.

HEAD OFFICE:

58/62 Gray's Inn Rd., LONDON, W.C.1

WE specialise in the erection of distinctive Shopfronts and every description of interior equipment for the Chemist and Druggist.

To our credit are some of the finest examples of modern planning for Chemists' shops throughout the capitals of the world.

The extent of our world experience and vast organisation enables us to offer a unique service in a consulting, advising and constructing capacity.

Enquiries and questions are invited for any contemplated alterations or additions to premises—please write us.

BY APPOINTMENT
Showcase Makers to H.M. The QUEEN
FREDK. SAGE & Co. LTD
Head Office
58-62 GRAYS INN Rd. LONDON W.C.1

opfronts designed and erected.
St uctural alterations practically carried out.
Interiors equipped and intelligently planned.
Chemists' Dispensing Counters and Back Screens.
Makers of scientifically constructed, elastic and quick serving fitting, for the stocking and displaying of goods.
Standardised Display and Stock-holding Counters in great variety.
Chemists' sundry fittings and Window Display fittings.
Showcases and Lobby Showcases of every description.
Electric Lighting Installations, Signs, Fascias, Tablets, Grilles, Gates and Metal Work.

Write us for Catalogues, stating particulars of requirements.

BRANCHES
13b, MARGARET STREET, OXFORD STREET, W.
92, WOOD STREET, CITY, E.C.2
8, PORTLAND STREET, MANCHESTER
WALTON, PETERBOROUGH
PARIS, BRUSSELS, BUENOS AIRES, JOHANNESBURG, DURBAN.

FREDK. SAGE & CO. LTD
THE LARGEST SHOPFITTING ORGANISATION IN THE WORLD

Free from the Cares of the Day

Passers-by are drawn to the brilliantly-lighted window with minds receptive to impressions and ideas. Many will return to buy the things they have seen and examined at leisure.

"Late Lighting" and bright and pleasing displays make a street popular and draw an appreciative public.

GOOD LIGHT
at night is the most effective and economical Advertisement available to a Shopkeeper.

ELECTRIC LIGHT
is the best light. It can be turned on or off by a *Clock Switch* without any trouble to you.

ELECTRICITY will make the window pay its rent

Screw, Slip-on & Vacuum Caps

IN ALL METALS.

Also Insect Powder Bellows.

Baker Metal Stopper Co., Ltd. *Reliance Stopper Works, 261 Icknield Street, Birmingham.*

Telegrams: "SCREWCAP, BIRMINGHAM."
Telephone: NORTHERN 1562.

POCKET LAMP BATTERIES

NEW SEASON'S LIST OF CASES, BULBS AND ELECTRIC NOVELTIES.

Write for Prices.

MILLARD BROS., Ltd.,
123 Houndsditch, London, E. 1.
Phone Avenue 3737

EMBOSSED
GUMMED PAPER
SEALS
AND LABELS

In colours or in gold for all packet goods, soaps, scents, bottles, etc. Finest workmanship and the cheapest prices. Any design, size or shape reproduced. Let us quote you for what you are using or submit a new design. State quantity. No charge for simple dies. Samples sent.

Livermore & Knight, Ltd., 181 Fleet St., London

English Filter POSTLIP *Papers*

SQUARES
CIRCLES
FOLDED
ROLLS

WHITE
GREY
PLAIN
ANTIQUE
EMBOSSED
CRINKLED

SAMPLES FREE

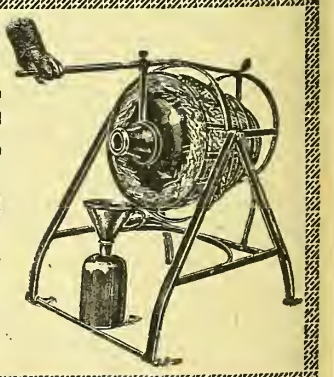
PURE ENGLISH FILTERING No 633 Mill Dean POSTLIP MILLS

Evans, Adlard & Co. Ltd
Postlip Mills, Winchcombe, R.S.O. Glos.

J. W. PINDAR & CO. Druggists' Engineers
PILL MACHINERY (Hand and Power),
Hand Pill Machines (for Chemists), Tablet Sugar Coaters (with Hot-Air Blowers), Pill Coaters, Counters with Shoot, Tincture Presses, Emulsifying and Mixing Machines, Percolators, Ointment Mills, Drug Mills, "Eternite" Ovens, Tablet Compressing Machines, &c.
Other Machinery for Manufacturing Druggists and Chemists.
Cachet Filling Apparatus for French and Moorstadt Series.
Suppository and Pessary Moulds, &c.
BROCKLEY, LONDON, S.E.4. Telephone: New Cross 1065.

For Cartons & Folding Boxes,
BOXFOLDIA LTD
TEN ACRES BIRMINGHAM

CARBOY STAND AND TILTER.



For drawing off small quantities of acids, etc, from Carboys, with ease and safety.

The Carboy can be tipped to any position with one hand.

R. & H. LEIGH & SONS,
LIMITED,
Carboy Hamper Manufacturers,
BOLTON.

Window Displays

MAKE your windows attractive with a good background.
J. C. KING'S LIST No. 648 OF WINDOW DRESSING PAPERS give specimens of this necessary background

FROM **1/3** PER ROLL and upwards.

All patterns are sure business pullers
Sent post-free and free of charge for inspection, on receipt of postcard

J.C.KING LIMITED,
42-60 GOSWELL ROAD,
LONDON.

S.V.M.

Stock Labels to use with your present kind to avoid liability owing to the altered constituents.

100 **9d.** 1,000 **4/6**

Printers
JAMES TOWNSEND & SONS
Exeter & London

Collapsible Tubes

TIN IS CHEAP.
TRADE IS SLACK.
LABOUR ONLY IS DEAR.
PRICES ARE MODERATE

Because our Works are equipped with the most up-to-date labour-saving machinery, and we are content with the lowest margin of profit.

Betts & Co Ltd
1. Wharf Rd., City Rd.
London. N.1.
Established 1857.

Telephone—VICTORIA 7533 (4 lines). Telegrams—"Dicotto, Sowest, London."

W. B. DICK & CO., LTD.

26 Grosvenor Gardens, London, S.W.1

Works : LONDON, LIVERPOOL, GLASGOW

PARAFFINUM LIQUIDUM B.P.

Guaranteed to remain bright at 0° C.

White and Half White Oils

B.P. White and Yellow Petroleum Jellies

QUOTATIONS & SAMPLES will be sent on application.

JOHN WATNEY & CO. LTD.
DISTILLERS

Manufacturers of finest **doubly rectified** grain spirit especially suitable for all manufacturing chemists, druggists & perfumers

The Distillery
YORK RD., WANDSWORTH
LONDON, S.W.18.
ESTABLISHED NEARLY A CENTURY.

Enquiries solicited for all Grades of Oil

FOR

MOTOR TRACTOR OILS

HEAVY · MEDIUM

WRITE TO
LANGLEY-SMITH & CO.
14/20 ST. MARY AXE
LONDON - - E.C.3

Telegrams : "Tallowdom, Phone, London." Telephone : Avenue 3820 (3 lines).
(8)

"Specialty" PETROLEUM JELLY

QUALITY—PURITY—PRICE

Three things keen buyers look for. Because we are one of the largest importers of Petroleum products we are able to supply Petroleum Jellies which in these and all other respects are unequalled.

"Specialty" Petroleum Jellies are supplied in white and yellow; and packed in 1-lb., ½-lb., and ¼-lb. decorated tins.

SOLD ALSO IN BULK
in 7-lb., 14-lb. and 28-lb. tins and in 3½-cwt. barrels.

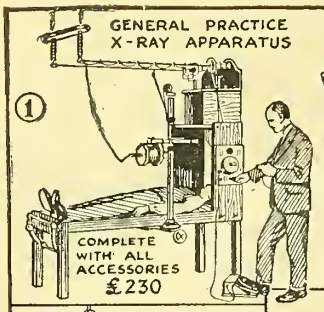
Send a postcard for samples and prices. Attractive showcards supplied.

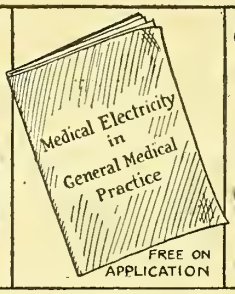
"SPECIALTY" DEPT.

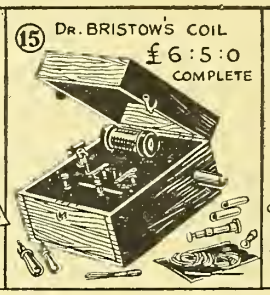
Telegrams: "Nufinjol, Norwest, London."

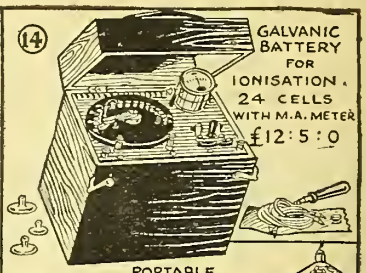
ANGLO-AMERICAN OIL CO. LTD.
Albert Street, Camden Town, London, N.W.1.

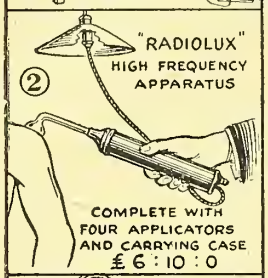
Telephones: Hampstead 4046 and 4047.


GENERAL PRACTICE X-RAY APPARATUS
①
COMPLETE WITH ALL ACCESSORIES £230


Medical Electricity in General Medical Practice
FREE ON APPLICATION


⑮ DR. BRISTOW'S COIL £6:5:0 COMPLETE


⑭ GALVANIC BATTERY FOR IONISATION. 24 CELLS WITH M.A. METER £12:5:0


② "RADIOLUX" HIGH FREQUENCY APPARATUS
COMPLETE WITH FOUR APPLICATORS AND CARRYING CASE £6:10:0

Electro Medical Apparatus

Enquiries, both from Doctors and private individuals, are increasing. The Chemist is the appropriate person to handle the business. Do not let it go to a rival.

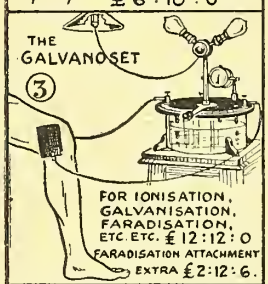
WHATEVER YOU ARE ASKED FOR WRITE TO US. WE CAN GIVE YOU HIGHEST GRADE WORKMANSHIP AT COMPETITIVE FIGURES.

X-Ray Apparatus.
Radiant Heat & Light Apparatus.
Galvanic Batteries, etc.

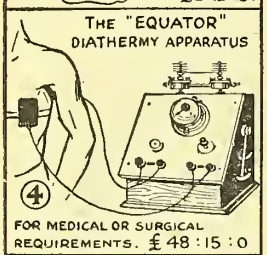
MEDICAL SUPPLY ASSOCN. LTD.
167-185 Gray's Inn Road, London, W.C.1

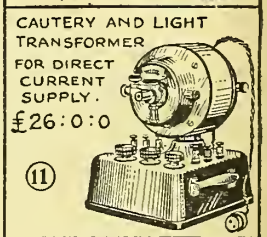
We invite you to visit our Showrooms.

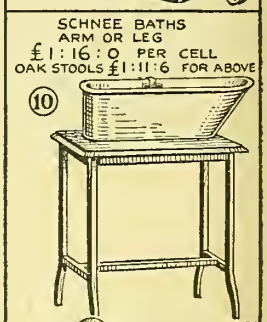
PORTABLE GALVANIC RHEOSTAT FOR USE WITH DIRECT CURRENT SUPPLY. £10:10:0. FOR IONISATION, ETC.
⑬

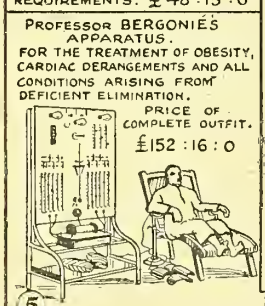

THE GALVANOSET
③
FOR IONISATION, GALVANISATION, FARADISATION, ETC. ETC. £12:12:0
FARADISATION ATTACHMENT EXTRA £2:12:6.

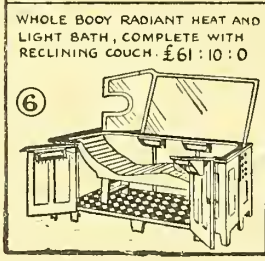
CAUTERY AND LIGHT TRANSFORMER FOR ALTERNATING CURRENT
£7:10:0
⑫

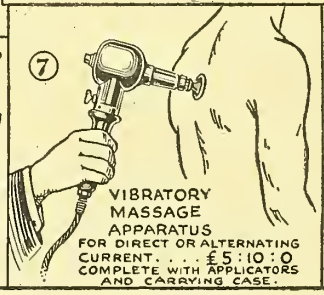

THE "EQUATOR" DIATHERMY APPARATUS
④
FOR MEDICAL OR SURGICAL REQUIREMENTS. £48:15:0

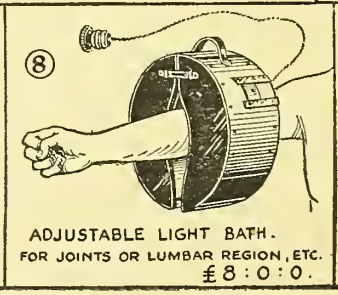

CAUTERY AND LIGHT TRANSFORMER FOR DIRECT CURRENT SUPPLY.
£26:0:0
⑪

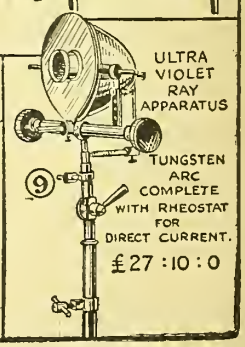

SCHNEE BATHS ARM OR LEG £1:16:0 PER CELL
OAK STOOLS £1:11:6 FOR ABOVE
⑩


PROFESSOR BERGONIÉ APPARATUS.
FOR THE TREATMENT OF OBESITY, CARDIAC DERANGEMENTS AND ALL CONDITIONS ARISING FROM DEFICIENT ELIMINATION.
PRICE OF COMPLETE OUTFIT. £152:16:0
⑤


WHOLE BODY RADIANT HEAT AND LIGHT BATH, COMPLETE WITH RECLINING COUCH. £61:10:0
⑥


⑦
VIBRATORY MASSAGE APPARATUS
FOR DIRECT OR ALTERNATING CURRENT. . . . £5:10:0
COMPLETE WITH APPLICATORS AND CARRYING CASE.


⑧
ADJUSTABLE LIGHT BATH.
FOR JOINTS OR LUMBAR REGION, ETC.
£8:0:0.


ULTRA VIOLET RAY APPARATUS
⑨
TUNGSTEN ARC COMPLETE WITH RHEOSTAT FOR DIRECT CURRENT.
£27:10:0

THE CHEMIST AND DRUGGIST SUPPLEMENT

42 CANNON ST. LONDON E.C.4

NOVEMBER 15, 1924

This Supplement is inserted in every copy of The Chemist & Druggist.

THE CHEMIST AND DRUGGIST SUPPLEMENT

REVISED ADVERTISEMENT TARIFF.

Businesses Wanted and for Disposal, Premises to Let, Goods for Sale, and Agencies—6/- for **50** words; every additional **10** words or less, **6d.**

SITUATIONS OPEN—6/- for **40** words; every additional **10** words or less, **6d.**

SITUATIONS WANTED—2/- for **18** words; every additional **10** words or less, **6d.**

Legal Notices, Tenders, Auctions, and all specially-spaced announcements, **1/3** per nonpareil line (12 lines = 1 inch single column).

Miscellaneous (Wholesalers') Section for odd and second-hand lots—**10/-** for **60** words; **1/-** for every additional **10** words or less.

EXCHANGE COLUMN (for Retailers, etc.)—Twopence per word, minimum **2/-**.

BOX NUMBER.

In each case replies may be addressed to a registered number or nom-de-plume, c/o this Office, at a charge of **1/-** extra for each advertisement.

PAYMENT.

All Advertisements are prepaid, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

THE CHEMIST AND DRUGGIST, 42 Cannon Street, LONDON, E.C.4.

Telephone: Central 3517 (3 lines). Telegrams: "Chemicus, Cannon, London" (2 words).

CLOSING FOR PRESS.

ALL ADVERTISEMENTS INTENDED FOR INSERTION IN THIS SUPPLEMENT

MUST REACH US NOT LATER THAN **FIRST POST THURSDAY MORNING.**

CHEMISTS' TRANSFERS.

Messrs. Orridge & Co., 56 Ludgate Hill, E.C.

Telephone No.: CITY 2283.

May be consulted at their Offices on matters of Sale, Purchase and Valuations

1.—VICTORIA.—Very old-established Dispensing Business; returns, last year, £3,235; net profit, £700; single-fronted shop, well fitted and stocked; six-roomed house, with kitchen, scullery and bath room; held on lease; further details on application.

2.—LONDON, N.—General Retail Business, with large N.H.I. Dispensing connection; established 40 years; returns average £1,700 per annum; double-fronted shop; small living accommodation; new lease for 21 years will be granted, or freehold may be purchased; price £1,100, or near offer entertained.

3.—LONDON, S.E.—Family Retail and Dispensing Business, with Kodak Agency; returns, £2,250; net profit, £700; large double-fronted shop, well fitted and stocked; good house and garden; held on lease at moderate rental; sub-let garden at £25 per annum; price to be arranged.

4.—EAST LONDON.—Retail and Dispensing Business, with Kodak Agency; established 50 years; returns, last year, £1,389; net profit, about £350; double-fronted corner shop; rent, £40; held on lease; electric light; price £650.

5.—SOUTH LONDON (Main Road).—Cash Retail and Dispensing Business, situate in good-class locality; returns £25 weekly, steadily increasing, under management; double-fronted shop, well fitted in mahogany and fully stocked; long lease; price £1,000.

6.—LONDON, S.W.—Middle-class Retail and Dispensing Business; returns about £1,000 per annum plus N.H.I.; the shop is well fitted and stocked; lease has 13 years to run; no immediate opposition; offers invited.

7.—ELEPHANT AND CASTLE (within easy distance of).—Cash Drug Stores; returns £1,750 per annum, at full prices; large single-fronted shop; 12 years lease to run; garage let off at £1 weekly; price £1,000.

8.—DEVONSHIRE.—High-class Dispensing Business, with Branch; combined turnover exceeds £4,000 per annum, at full prices; both pharmacies are double-fronted and handsomely fitted; estimated value of stock and fixtures, £2,650; respective rents, £60 and £65 per annum; both establishments held on lease; further details on application.

9.—LINCOLNSHIRE.—Family Retail and Dispensing Business; returns exceed £2,500 per annum, at full prices; double-fronted shop, fitted in mahogany and well stocked; 9-roomed house; electric light, garage, and garden; new lease will be granted; further details on application.

10.—FOLKESTONE (Near).—Retail and Dispensing Business, with Wine Licence and small Optical connection; returns, present rate, £2,000 per annum; attractive pharmacy, very well fitted; good working stock; comfortable house, garden; held on lease, or property may be purchased; further details on application.

11.—CORNWALL.—Light Retail, Dispensing and Photographic Business; returns approach £2,000 per annum, at good prices; double-fronted shop; Vendor estimates value of stock and fixtures at £1,200; the premises are held on lease at a moderate rental; price £1,600.

12.—ESSEX (Few Miles Out).—Cash Retail Business, very much neglected; returns, about £1,700 per annum; net profit, 25 per cent.; double-fronted shop; small house; very low rent; held on lease; further details on application.

13.—CHESTER (Near).—Ready-money Business, chiefly Family trade, with small Optical connection; returns, last year, £1,685; gross profit, £550; stock and fixtures estimated at £875; rent, £66; sub-let 13s. weekly; price, to include goodwill, stock, and fixtures, £1,000, or valuation terms if desired.

14.—SURREY.—Good middle-class Family, Dispensing and Retail, with Kodak Agency; position good; established upwards of 50 years; returns average £1,359; net profit, about £400; comfortable residence, garden; rent £50; held on lease; price £950, or near offer.

Messrs. O. & Co. desire to emphasize the necessity of a periodical Statement of Account by which means alone **Profit, the value of Business, &c.,** can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted and eventually becomes confusion and loss.

Valuations for Stocktaking

Messrs. O. & Co. are prepared to undertake these essential duties and make **Special Terms** for such service.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.4

The Association of Mnfg. Chemists

— LIMITED —

BUSINESS AGENCY TRANSFER AND VALUATION DEPARTMENT

Head Offices—**Kimberley House, Holborn Viaduct, London, E.C.1**

(and at 2 Bixteth Street, Liverpool)

PARKIN S. BOOTH, Accountant and Valuer.

(TELEPHONE:—CITY 1261-2-3.)

WANTED.

FROM 15-20 GOOD-CLASS RETAIL BUSINESSES, in prosperous localities, must bear strictest investigations; turnover not less than £5,000 p.a.

Vendor could acquire an interest in a Company which will control the multiple shops.

Send fullest information in confidence to this office.

BUSINESSES FOR DISPOSAL.

FOR IMMEDIATE DISPOSAL.

1.—LONDON.—An exceptional opportunity to acquire three shops doing an excellent trade in Chemists' Sundries and Toilet Requisites; situated in City and immediate vicinity; good leases for two shops; one with agreement with 2 years to run; turnover for last year for 2 shops, £6,029, £2,466. Fullest particulars on application. (140)

2.—PATENT MEDICINE.—Well-known, showing good profit both to the manufacturer and retailer; easily worked; has been extensively advertised; price £1,500. Fuller particulars on application. (143)

3.—LONDON, S.W.—Well-fitted Cash Drug Stores, taking £20 p.w.; rent, £70 p.a.; 3 years' agreement, but 10 years' lease will be granted; excellent dwelling accommodation, in main and busy thoroughfare; growing district; price £730. (101)

4.—LONDON, N.W. (off Euston Road).—Old-established Cash Business, with N.H.I., in working-class district; turnover, £33 per week; rent, £84 p.a., let off £49 p.a.; premises held on yearly agreement; lock-up shop; price, for quick sale, £650. (116)

5.—LONDON, W.—Good Dispensing Business; rent, £150, inclusive; 11 years' lease; lock-up shop; good scope under personal supervision, price £975, all at. (114)

6.—S. COAST.—Manufacturing Chemist Business, owning well-known proprietary line which makes a strong appeal to the public; turnover, 1922-23, £6,000; 1923-24, £7,000; large factory premises could be purchased for £3,000, or 7 or 14 years' lease could be granted; fuller particulars on application. (142)

7.—KENT (Country Town).—Very old-established Chemist and Optical Business; returns, £50 p.w., very profitable; well-fitted lock-up shop and sight-testing room; large hall at rear; cellars, etc.; lease could be granted, or freehold of excellent property, comprising 2 shops, with offices above, can be acquired; price for goodwill, fixtures, fittings, and stock, £2,900; freehold property, £4,000. (138)

8.—MONMOUTH.—Old-established Business, in market town; returns, £35 p.w.; rent £50, rates £34; 7 years' lease, renewable; well stocked and fitted; Kodak and Optics; N.H.I.; price £1,250. (118)

9.—SOMERSET.—Old-established Business, in country town; returns, £22 p.w.; 7 years' lease at £40 p.a.; lock-up double-fronted shop; price £1,200, or offer. (144)

10.—S. DEVON.—Good-class ready-money Business in important town; returns, £30 p.w.; Kodak, N.H.I., etc.; double-fronted shop, with 8-roomed house; price, including freehold property, £2,600. (134)

STOCKTAKING.—Do you realize the importance of knowing the true value of your stock, and thus being able to arrive at a net working profit? We undertake this work for an inclusive fee at short notice. Write for terms.

BERDOE & FISH

WILLIAM S. FISH.

Valuers and Transfer Agents,

41 Argyle Square, KING'S CROSS, W.C.1

(One minute from St. Pancras and King's Cross Stations.)

1.—KENT (Few Miles Out).—Old-established General Cash Retail, with branch; owner retiring; returns, over £2,700; good profits; Kodak Agency; long leases; price £2,000, or near offer; recommended.

2.—SUSSEX COAST.—High-class Dispensing and Retail Business, facing the sea; Kodak Agency; very handsome, modern pharmacy; every convenience; stock and fixtures worth £1,750; long, valuable lease; price £2,150; recommended.

3.—SOMERSET (Market Town).—Old-established Light Retail, badly neglected; was doing £2,500, and can again; low rent; lock-up shop; good position; fully stocked; price about £1,200.

4.—BRIGHTON.—Cash Drug Store; under manager; returns average £24 weekly; qualified principal would double this; double-fronted shop, good position; well stocked; price £675.

5.—CRYSTAL PALACE (Near).—Good middle-class suburban Retail, selling through ill-health; returns, £2,300; net profit, £600 to £700; good house and shop, fully stocked; price £1,500 cash; worth seeing

6.—NORTH LONDON.—Sound Cash Retail, with large sale of own specialities; returns, £3,500; excellent profits; low rent; on lease; very heavily stocked; price about £2,500; personally recommended.

7.—VICTORIA STATION (Near).—High-class Dispensing and Retail Business; returns, £3,250; net profit, £700; held on lease; moderate rent; good residence; well fitted and stocked; price £2,500

8.—LONDON, N.—Cash Retail, Prescribing, with large Panel; returns, £1,700; net profit, £500; densely populated locality; plenty of scope; corner shop, with house attached; price £1,100.

STOCKTAKING VALUATIONS.

We are now booking dates for November and December, and invite early correspondence. Terms sent on application.

ESTABLISHED 1870. Telephone: 651 Museum.

ERNEST J. GEORGE

Stock Valuations for all purposes and accounts prepared to meet Income Tax difficulties.

SPECIAL TERMS for Annual Engagements.

3 ST. PAUL'S CLOSE, WALSALL

TELEPHONE 774.

JOHN BRIERLEY

Valuer, Transfer Agent & Expert Stocktaker

135 Queen St., Newton Heath, Manchester

My latest list comprises a splendid selection of Seaside, Town and Country Businesses from £400 to £4,500. Full particulars sent to Principals and bona-fide clients only.

Please state clearly your requirements.

BUSINESSES WANTED.

GOOD-CLASS to Medium Family and Dispensing, etc., in Midlands or Home Counties, from £2,500 to £3,500; preferably with living accommodation, for cash. Particulars to 130/16, Office of this Paper.

MESSRS. BERDOE & FISH are in immediate want of Businesses, and vendors will find it to their advantage to correspond with us, we having at the present time a large number of genuine cash buyers with from £700 to £4,000 at command, and ready to take over at once; private registers kept, and strict privacy assured. Valuation Offices: 41 Argyle Square, King's Cross, W.C.1.

WANTED, Chemist's Business or premises suitable for same; West Riding, Yorks. Reply to 129/35, Office of this Paper.

WANTED, good-class Business, capable of being increased, and returning about £30 per week; with housing accommodation if possible; Nottingham district preferred. "Verus," 129/14, Office of this Paper.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

BIRMINGHAM.—Good-class suburb, main road, market position; modern fittings in mahogany recess, labelled shop bounds; well-equipped Pharmacy; electric light; Kodak Agency; N.H.I.; takings £25 per week; possession of good house; lease; price £950. 128/11, Office of this Paper.

LIVERPOOL.—Excellent Chemist's Business, splendid position, returning £40 weekly under management; handsomely fitted; well stocked; good house attached; vacant possession; this business is absolutely first hand, and a bargain at £1,750; valid reasons for disposal; a sound and genuine concern. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester.

LIVERPOOL.—An old-established Business in busy thoroughfare, working-class district; good opportunity for energetic, qualified man for N.H.I. work; corner shop; low rental; house attached; well stocked; good fittings; price £425. Further particulars write A. McLauchlin, Chartered Accountant, 216 Stanley Road, Bootle, Liverpool.

LONDON.—Middle-class Cash Retail and Dispensing Business in main road; opening for Optics and Dentistry; returning about £2,000; long lease; good accommodation; price £750 cash. "Map," 129/40, Office of this Paper.

MANCHESTER AND DISTRICT.—Selection of Businesses, comprising Chemists and Drug Stores, with and without living accommodation, returning £16 to £30 weekly; lease; price £400 to £1,000. Also established Business near Blackpool, with Wine and Spirit Licence; returns £35 weekly; scope all branches; price £1,500 for freehold property (vendor's own) and a further £500 for fixtures, goodwill, etc.; stock at valuation. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester.

MONMOUTHSHIRE.—Retail Business for Sale in good industrial town; large lock-up, double-fronted shop in main street; well stocked and fitted; low rent on lease; turnover about £25 weekly, and capable of substantial improvement; price about £800 cash (valuation of stock and fixtures); selling for health reasons. 129/38, Office of this Paper.

PLYMOUTH (near).—Sound Chemist's Business, modern, returning £25 weekly under management; excellent position; plenty of scope; price £2,600, including property (freehold, vendor's own). Also high-class Dispensing and Family Business, old established, offering unlimited scope, returning £1,700 yearly; price £1,500; excellent house. Brierley, Chemists' Valuer, 135 Queen Street, Newton Heath, Manchester.

WEST RIDING, YORKS.—Fine going Retail and Dispensing Business; large house and roomy commodious shop; no near opposition; splendid position; the property is freehold and in excellent condition; must sell owing to continued ill-health; returns £2,000 per annum. Apply 117/14, Office of this Paper.

WEST RIDING (Yorks).—For immediate Disposal, well-established Business in rapidly developing colliery district; double-fronted shop, well fitted and stocked; Kodak, N.H.I. and Medicated Wine Licence; good living accommodation; turnover £700-800 per annum; will shortly be doubled; good opening for Optics; price £700; property (vendor's own) may be purchased or favourable lease will be granted; Advertiser opening in native town. 130/36, Office of this Paper.

YORKSHIRE.—Excellent Cash Business for Disposal in best suburb of large South Yorkshire city; well fitted in mahogany; very well stocked; convenient house, electric light throughout; Kodak Agency; returns, £2,500 per annum; price, including property, £2,500. 130/17, Office of this Paper.

A GOLDEN OPPORTUNITY.—West London suburb, populous neighbourhood; live Business for Sale, centre of local market; established one year; lease; low rent; returns £1,300; well stocked; lock-up shop; price offered to immediate purchaser £750 cash; under management; great opportunity for smart man. Apply 128/39, Office of this Paper.

FOR Sale, owing to ill-health, with vacant possession at an early date, a substantial stone-built fireproof modern Shop, occupying the most important central position in thriving Yorkshire town, with population approaching 80,000; the property is four storeys high and basement, with a frontage of approximately 70 ft. Apply 115/4, Office of this Paper.

£650.—CHEMIST'S Business in pretty West Riding village; nice shop; fitted in mahogany; electric light; good house, with every convenience, and garden; no opposition; easily worked; established 10 years by vendor, who is retiring; particularly suitable for middle-aged gentleman. Write Chas. C. Marsden, Chemists' Valuer, 44 Sholebroke View, Leeds.

AGENCIES.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

ENGLAND.—Swiss Glue Manufactory wants good Agent or Wholesale House for the sale of first-class Glues and Technical Gelatines for England. Firms being well acquainted with this line are invited to apply, by letter, to "R. O.," c/o Charles Barker & Sons, Ltd., 31 Budge Row, London, E.C.4.

15 PER CENT. commission; side line; well-known and established Proprietary; quick seller; sure repeater; small pocket samples; London, North, East and South Coasts, West of England and Midlands; state full particulars and references; only live men need apply. 129/29, Office of this Paper.

LEGAL.

NOTICE is hereby given that the partnership heretofore subsisting between us the undersigned, Wilfred Frederic Willis and John William Wilberforce Cassels, carrying on business of Merchants at Number 37 Cursitor Street, in the County of London, under the style or firm of Willis & Co., has been dissolved by mutual consent as from the 11th day of October, 1924. All debts due to and owing by the said firm will be received and paid by Mr. W. F. Willis, who continues the business under the same style.

Dated the 7th day of November, 1924.

W. F. WILLIS.
J. W. W. CASSELS.

FOR SALE.

DISPENSING Scales, B. D. H.; Pessary Mould, 60 grain, Maw; Pill Machine, 5 grain, Maw; Cachet Machine, cheap; Kodak 3A. Anastig. Lens; Kodak No. 4 Bull's Eye; Kodak No. 4 Panoram; all in perfect condition. What offers? Burton, Chemist, Devizes.

FOR Sale, Pill Making Machines, hand or treadle, viz., cutting machine, 15-in. brass cylinder, mahogany base, iron frame, wheel and treadle, 3½ ft. high, 3½ ft. wide; also Piping Machine, 7¾-in. brass cylinder, 3½ ft. high, 2¾ ft. wide. Apply 128/28, Office of this Paper.

SURPLUS STOCK.—Pill Machine (24 x 5 gr.), mahogany, 22s. 6d.; Pill Machine (24 x 5 gr.), with marble slab, 15s. Dispensing Scales, similar Fig. 6 May Roberts' list, 22s. 6d.; similar, Fig. 10, ditto, 15s. All practically new. "Silex," 128/37, Office of this Paper.

TO WATERGLASS PACKERS.—We have a small surplus of Cardboard Containers, in first-class condition, which we offer at a cut rate, 1 lb., 6s. 9d.; 2 lb., 13s.; and 4 lb., 23s. per gross. Samples on application. Goodall, Backhouse & Co., Leeds.

4 x 28-lb. pcls. Pot. Brom. P.B. What offers? 130/22, Office of this Paper.

PREMISES FOR SALE.

SHEFFIELD, centre of City (York Street, one of the streets leading out of High Street).—The "Sheffield Telegraph" are rebuilding part of their site, and are prepared to consider applications for Warehouses, Shops and Offices, which can be adapted to requirements of suitable tenants. Apply to General Manager, "Sheffield Telegraph," Sheffield, or to Gibbs, Flockton & Gibbs, Architects, St. James' Row, Sheffield.

APPRENTICESHIP.

APPRENTICE, either sex; business and examination work thoroughly taught by qualified Chemist; small premium required. Apply 54/684, Office of this Paper.

SITUATIONS OPEN.

[*HOME.*]

RETAIL.

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

The Advertiser may if preferred have replies addressed to this Office. and forwarded on payment of an additional charge of 1/-.

BIRMINGHAM.—Raynes Dispensing Chemists, Ltd., 28 Bath Row, require a capable qualified Gentleman to take charge; also a smart Junior Assistant. Give fullest particulars and salaries expected.

BRISTOL.—Junior Assistant (male) wanted for quick Cash Retail and N.H.I. Dispensing; must be a quick and accurate Dispenser, also have knowledge of Photography. Apply, stating salary required (outdoors), age, height, references, etc., F. Moss, 183a Redland Road, Bristol.

CARDIFF.—Lady Dispenser required; experience and good recommendation essential. Full particulars to Duck & Son, St. John's Square.

IPSWICH.—Qualified Assistant, 22-30, with Photographic experience. Apply, with references and salary required, to G. W. Hales, 21 Tacket Street.

LEICESTER.—Junior Assistant or Improver wanted for good-class Retail Business. Apply, stating age, height, salary required, and when disengaged, to Hind, 78 Queen's Road, Clarendon Park, Leicester.

LONDON, W.1.—Smart, unqualified Assistant required at once; must be good Window-dresser, capable Dispenser, and have good knowledge of Photographic trade. Please state salary required (outdoor) and give full particulars in first letter. 126/14, Office of this Paper.

LONDON. — Qualified, young, single; permanent and progressive post if satisfactory; state salary required. "London," 128/23, Office of this Paper.

LONDON, N.—Lady Assistant wanted, with London experience, for good middle-class business; good Counter hand essential Apply, with full particulars, to Marshall & Co., Cash Chemists, 78 High Street, Kingsland, E.8.

PARISH OF HAMMERSMITH.
PART-TIME DISPENSER.

THE Guardians invite applications for the appointment of Dispenser of Medicines for outdoor poor. Hours of attendance at Dispensary, Cathnor Road, W.12, from 9.30 a.m. to 11.30 a.m. and 5.30 p.m. to 7 p.m. each week-day.

Candidates must hold either the Minor or Major qualification of the Pharmaceutical Society.

Salary £3 3s. per week (no bonus), subject to percentage deductions under Poor Law Officers' Superannuation Act, 1896.

Forms of application, which can be obtained from the undersigned by forwarding stamped, addressed envelope, must be returned by 10 a.m. on Tuesday, the 18th November, 1924.

The successful candidate will be required to undergo a Medical Examination by the Guardians' own Medical Officer.

By Order,
W. H. GLANVILLE,
Clerk to the Guardians.

206 Goldhawk Road, W.12.
3rd November, 1924.

PRESTON.—Qualified Assistant wanted at once (single); Dispensing and Family Business; N.H.I. State full particulars. John McGavin & Son, Chemists, 110 Friargate, Preston.

We desire particularly to draw the attention of Colonial and Foreign Subscribers to the fact that in cases where they require partners, agents or assistants, or wish to sell their businesses, an Advertisement in this Supplement, placed in every copy of "The Chemist and Druggist," should be the readiest means of helping them to attain their object. The tariff for such announcements is given under the appropriate headings in the Supplement. Instructions and remittances can be sent to us direct or through the advertisers' correspondents in this country.

PHOTOGRAPHS, TESTIMONIALS, &c.

When answering advertisements in this section applicants are strongly advised not to send (unless specially requested) ORIGINAL TESTIMONIALS or VALUABLE PHOTOGRAPHS. As can be readily understood, when an advertiser receives from 60 to 100 replies the task of returning photographs, testimonials, &c., is one of some difficulty.

RHYL.—Wanted, experienced, unqualified male Assistant easy hours; highest references indispensable. State age experience, and salary required to Ashfield, Chemist, Rhyl.

SOUTH OF ENGLAND.—Reliable Assistant for Dispensing Counter, and to take charge occasionally; abstainer preferred. Age, salary required, details of experience and references to 129/28, Office of this Paper.

SOUTHSEA.—Wanted, Assistant (male), single, in good-class Dispensing and Retail. Apply, with full particulars of age, height, experience, reference, salary required, and enclose photo (to be returned), to W. A. Bell, Chemist, The Strand, Southsea.

ASSISTANT for Stock-taking; two or three weeks; £6 weekly offered to capable man. Randall & Son, Ltd., Swanage.

AT ONCE.—Smart, Unqualified Dispenser and Counterman; one used to quick N.H.I. preferred; age between 20 and 25 years. Please state salary required, and enclose photograph if possible, to W. H. Lester, Rexall Pharmacy, 1 Bridge Street, Nuneaton.

HALL Certificate (lady), Counter experience an advantage, required for Holloway and Balham districts. Full particulars to 54/682, Office of this Paper.

LADY Dispenser wanted (Minor qualification essential), with knowledge of Counter work and Photography. Photo, references and salary required to Jones, 30 Mardol, Shrewshury.

MANAGER, young, qualified, wanted first week in December to open a local branch, with modern flat attached. State age, experience (photo if possible), and salary required to T. Bellamy, Pharmaceutical Chemist, Tindal Square, Chelmsford.

MANAGER, wanted at once for a small business in London. Usual particulars as to age, salary, etc. "E. S.," 129/25, Office of this Paper.

QUALIFIED, to manage small Pharmacy in working-class district of Manchester, chiefly N.H.I.; salary and commission (£5 guaranteed). Apply by letter immediately to. Craig, 217 Conran Street, Moston, Manchester.

QUALIFIED Branch Manager required for a high-class Dispensing and Toilet business. Apply, with full particulars as to age, height, salary and experience (photo if possible), to Leo. Benjamin, 57 Cold Bath Road, Harrogate.

QUALIFIED Assistant; outdoor; energetic; Salesman, Window-dresser; knowledge of Photography; able to take charge; vacancy after Christmas. Full particulars as to age, experience, salary, etc. Davis, Rexall Pharmacy, Chesham.

QUALIFIED Manager, single; excellent opportunity for steady and reliable young man anxious to get on. 128/230, Office of this Paper.

QUALIFIED Assistant wanted; must be capable Dispenser and with all-round shop experience; lady not objected to, but first-class references necessary; premises near Elephant and Castle. Full particulars as to age, salary, etc., 129/18, Office of this Paper.

QUALIFIED Manager; must have had first-class general experience in up-to-date business; good Window-dresser, with Photographic experience. Send full particulars to 54/681, Office of this Paper.

SMART Junior (male), for busy Dispensing and Counter business. Full particulars to George Bruce, Chemist, Westcliff-on-Sea.

WANTED, an Assistant, not necessarily qualified. Reply, with full particulars *re* salary, reference, age, etc., and experience, 130/38, Office of this Paper.

VANTED. a live qualified Assistant; must be a good Salesman, Window-dresser and efficient Dispenser; married; good position; with self-contained flat; permanency with portunity. Please give full particulars as to experience and alifications, which will be treated in the strictest confidence. Pharmacist," c/o Messrs. S. Maw, Son & Sons, Ltd., 7-12 dersgate Street, E.C.1.

VANTED, gentlemanly Junior (outdoors) for high-class Dispensing and Photographic Chemist; Exeter. Write, stating e, salary and photo, 130/9, Office of this Paper.

WHOLESALE.

. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

CIVIL SERVICE COMMISSION.

SSISTANT Inspector of Medical Supplies, War Office, salary commencing at £200 per annum and rising by £10 incrents annually to £300 per annum, with cost of living bonus addition. This pensionable civil appointment will shortly come vacant. Candidates must be: (1) Natural-born British bjects and, unless they have served in the armed forces of e Crown during the recent war, children of fathers who are tural-born British subjects; (2) under 25 years of age; and) Pharmaceutical Chemists holding the Major Diploma of the harmaceutical Society of Great Britain. Preference will be ven to candidates who served in His Majesty's Forces in the reat War. (The age limit at entrance will be extended in the se of suitable candidates who have served in His Majesty's rces, by the period of such service.) Applications, which ould state date of birth and should be accompanied by references and a full record of qualifications and experience, should addressed in writing to the Under Secretary of State (C.4), e War Office, London, S.W.1.

PROGRESSIVE Packed Goods and Perfumery house requires live Representative, in Scotland; a Salesman eady carrying one other line will find this an excellent oposition; retail experienco essential. 54/679, Office of this per.

ADY Shorthand-Typist required by London firm of Wholesale Druggists; experience of the trade absolutely essential. ate age, experience, and salary reqnired. P.C.B. 22/20, Office this Paper.

EPRESENTATIVES.—Live men, with knowledge of Toilet business and with knowledge of territories indicated, quired by established bnsiness of high repnte; only men who n command and maintain business will be entertained. Territies: (1) Midlands; (2) Yorkshire, Durham, Northumberland. Perfumes," 54/683, Office of this Paper.

EPRESENTATIVES, with established connections with high-class Chemists, Stores, Hairdressers, required to handle commission high-grade Concentrated Perfumes; all territories en; no objection to other non-clashing lines. Full particulars dress P.C.B. 18/36, Office of this Paper.

EPRESENTATIVES wanted for London Laboratories to introduce a new Speciality to the Medical Profession on rictly ethical lines; age 35-40. Reply, giving full particulars to age, experience, salary required, 54/677, Office of this per.

EPRESENTATIVES wanted on commission by North of England Firm, established over 60 years, now completely organising its bnsiness and requiring few first-class Salesmen. pplications are invited only from those who are able to show od sales records and accustomed to big earnings; original reparations now being advertised in the Press; unique opportuty and good remuneration for the right men. Apply, in strict nfidence, stating ground covered, if worked by car, and lines any) carried at present. 130/8, Office of this Paper.

RAVELLERS required for England and Wales, certain ground excepted, to call on Chemists with good well-known nter lines; commission and small expenses; state ground vered. 54/680, Office of this Paper.

O PER CENT. commission first and repeat orders; quick selling sideline, well-known speciality; sells 3d. and 6d.; ritory open—London, Liverpool, Yorkshire, Midlands, Sonth ales, Eastern Counties; small samples; novel show matter. rite particulars, confidence, to "Sales Manager," 12 St. hn's Road, Croydon.

[COLONIAL, INDIAN AND FOREIGN.]

ONTE CARLO.—Applications to the Pharmacie Anglaise not replied to will kindly take it for granted that the st is filled.

SITUATIONS WANTED.

RETAIL.

[*HOME.*]

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

A.A.A.—As Manager; smart young Pharmacist, 26; ex-public school; first-class experience; expert Salesman, Window-dresser, general Business Organiser; thoroughly efficient and reliable; view financial interest an attraction. Gould, 37 Fairfax Road, Bedford Park, W.4.

A CAPABLE, fully experienced, qnalified Chemist, abstainer, desires post as Manager or Assistant. P.C.B. 22/24, Office of this Paper.

A CAPABLE and fnlly experienced Pharmacist as Manager or otherwise; disengaged; permanency or locum. "Chemist," 10 Godwin Road, Forest Gate, E.7.

A CAPABLE and experienced Dispenser (Minor); highly recommended; Counter, Photography; willing worker; moderate salary. "Miss H.," 118 High Street, West Norwood, S.E.27.

A CAPABLE, experienced, Qualified Chemist seeks permanency as Manager, branch or otherwise, in high-class Family Dispensing Business; country or seaside; first-class experience Counter, Dispensing, Photographics; active, energetic; middle-aged; married; live on premises if desired. 130/34, Office of this Paper.

A QUALIFIED Man, 39, desires Managership or responsible position; good all-round experience; also accustomed to Store trade; would entertain view to succession; London or near; now disengaged. Apply 130/3, Office of this Paper.

A QUALIFIED woman, 25, desires position, Manager or Assistant; 6 years' good Retail experience; good reference. 129/15, Office of this Paper.

A QUALIFIED man desires Managership; 30 years' first-class Dispensing experience; Major; tall; single; introduce good Proprietaries; disengaged. 129/8, Office of this Paper.

A THOROUGHLY capable Assistant, good experience in Dispensing, Counter and Agricultural trade, age 27, seeks permanency; country preferred. Evans, Chandos, Knighton, Radnorshire.

ACTIVE, energetic, tall, elderly; Minor; experienced Dispenser, tactful Counterman; any capacity. "R.," 20 Burlington Road, W.2.

ADVERTISER, 33, height 5 ft. 7½ in., seeks permanency in good business; well up Retail, Dispensing, Photographic; first-class Counterman and Window-dresser. "Zotol," 130/11, Office of this Paper.

ALL-ROUND; unqualified; 36; not fussy or afraid of work; keen and active; real good experience; used to quick Counter trade and up-to-date methods, Windows, etc.; 9 years last two situations; would manage Drug Stores; held similar position; London or near. 129/32, Office of this Paper.

ASSISTANT, unqualified, 25; business-like, tactful, obliging; experience; working a high-class business; moderate salary; references; disengaged. "Lotus," 127/25, Office of this Paper.

ASSISTANT; unqualified; energetic; first-class Dispensing experience; permanency; London only. P.C.B. 21/34, Office of this Paper.

ASSISTANT or Branch Manager; unqualified; all-round experience; would entertain purchase; good reference. P.C.B. 22/19, Office of this Paper.

ASSISTANT or Manager; qualified; male; thorough experience, best type Dispensing, Counter and Photo.; age 22. "Alpha," 89 Beechdale Road, S.W.2.

ASSISTANT, Part I, 8½ years' good all-round experience, Dispensing and Photographic, desires situation; good Window-dresser; tall. "Assistant," 4 Commercial Buildings, Canterbnry Road, Herne Bay.

ASSISTANT; 25; height 5 ft. 3 in.; all-round knowledge; normal wage; good references. Weller, Blenheim Place, Sholing, Southampton.

NAMES AND ADDRESSES.

When sending advertisements for any of the sections in this Supplement, advertisers—as a guarantee of good faith and not necessarily for publication—should always give their names and addresses. It sometimes occurs that this rule is not followed and delay and disappointment ensues. Strict attention to this detail will be appreciated.

ASSISTANT, 26, unqualified, disengaged, seeks engagement; N.H.I. Dispensing, Counter; highest references; North preferred, not essential. 109 Clova Road, Forest Gate, E.7.

ASSISTANT or Manager; qualified; best experience, Dispensing and Photographic; London or suburbs; outdoors. "Pharmacal," 129/13, Office of this Paper.

ASSISTANT, unqualified, desires post; Window-dressing, Counter and Dispensing; married; age 33. "Cxr.," Pinewood Cottage, Chesham Bois.

CHEMIST 27, capable, reliable, modern business methods, methodical worker, at present Manager high-class Pharmacy, free end December, would consider any responsible, progressive post; undeniable references. 125/4, Office of this Paper.

DISPENSER, lady, Hall, desires post; part-time or permanent; Doctor's, Chemists, Institution. "Mitte," 141 Auckland Road, Ilford, Essex.

DISPENSER, female, 25, Hall, 7 years' experience, desires post, preferably with Doctor. 128/38, Office of this Paper.

F.S.M.C., F.I.O. (May, 1921); competent Refractionist; accomplished Salesman; do own repairs; single; 29; assist Chemistry Counter; go anywhere; good-class Houses only; disengaged. 132/32, Office of this Paper.

IMMEDIATE.—Disengaged; experienced Minor man; part-time, Locum or permanency; moderate salary. "C. P.," 68 Grosvenor Road, Hanwell, W.7.

IMMEDIATELY.—Locum or permanent; thoroughly capable worker, with highest references; unqualified. "C. D.," 131 Mount View Road, N.4.

JUNIOR, 4 years' all-round experience, requires berth; good references. "Aspirin," 46 Aycliffe Road, Shepherd's Bush.

JUNIOR Assistant, 22, seeks opening; unqualified; good experience and address; well recommended. "H.," 138 Milkwood Road, Herne Hill, S.E.24.

JUNIOR, 20, desires situation; good Dispensing and Counter experience; in or near Camden Town. 130/4, Office of this Paper.

LADY Dispenser to Chemist or Doctor; qualified; experienced; good references; free. Apply P.C.B. 20/19, Office of this Paper.

LIVE Salesman, with Scottish connection, will accept genuine selling proposition. Particulars, in confidence, to 128/25, Office of this Paper.

LADY (Hall Certificate) Book-keeper requires post with Doctor; 5 years' experience with busy firm. 126/10, Office of this Paper.

LADY Pharmacist (1919), thoroughly experienced, Dispensing and Counter, able to take charge, desires post; Liverpool or Wallasey preferred; disengaged. Dodd, 45 Radnor Drive, Wallasey.

LADY; unqualified; 11 years' experience in Retail Pharmacy; highest references. Parker, 7 Dunbar Road, Forest Gate, E.7.

LADY Dispenser and Assistant, 24, desires post with Chemist or Doctor in West of England; 7 years' good exeprience, Dispensing, Book-keeping, and Counter work; excellent references. Phillips, 76 King Street, Wellington, Shropshire.

LIVERPOOL OR DISTRICT.—Mr. Bryan, Chemist, Penmaenmawr, recommends trustworthy Assistant; 6 years' experience.

LOCUM or part time; Retail or Hospital; qualified. "M.," Illinois, 1st Avenue, Gillingham, Kent.

LOCUM.—Pharmacist, aged 38, temporarily undertaking Locum work; first-class experience; competent Manager; highest credentials; disengaged now. H. G. Green, 13 East Sheen Avenue, S.W.14.

LOCUM or permanency; Counter, Dispensing, Stock; low salary; excellent references and experience. "Disengaged," 49 London Street, Andover, Hants.

MANAGER or Locum; qualified; disengaged; good references. Address "Z.," Messrs. Southall Bros. & Barclay, Lower Priory, Birmingham.

MANAGER or Locum; qualified; well recommended; experienced; disengaged. Smith, 113 Brudenell Road, Upper Tooting, S.W.17.

MANAGER, 33, married, good experience in Photographics and Dispensing, qualified 1912, requires permanent post (with view to succession or partnership in about 18 months). 130/33, Office of this Paper.

MANAGER, Buyer; qualified 1911; France and West End 20 years; three languages; Photographic and Window-dressing. H. Griffiths, 5 Duckett Road, Harringay, N.4.

MANAGER, qualified, age 28, married, experienced all branches of business, desires responsible position. Apply 130/[illegible], Office of this Paper.

MANCHESTER OR DISTRICT.—Young, qualified Chemist; tall; good Counter, Dispensing, and Photographic experience; moderate salary. 130/15, Office of this Paper.

MINOR and Hall qualification (ladies) desire post in West-End or City Pharmacy; experienced and excellent references. Apply 130/26, Office of this Paper.

M.P.S., YOUNG, energetic, desires permanency, Manager or Assistant; fully experienced, Dispensing, Counter, Window-dressing; well recommended. G. Masterton, Parr's Farm Appleton, near Warrington.

PART time; lady, minor; two or three evenings per week; 6 years' experience; highest references. 128/26, Office of this Paper.

PERMANENCY or Relief; unqualified; all-round experience, Dispensing, Agricultural, Photographic; abstainer; good references. Henderson, 61 Castle Street, Kendal.

PHARMACIST; 36; first-class experience; Photography; London; at liberty. Williams, 4 St. Andrew's Mansions, Lower Clapton Road, E.5.

QUALIFIED Chemist desires post as Manager or Senior Dispenser; excellent experience and references; at liberty. 128/14, Office of this Paper.

QUALIFIED man; single; 38; temporate; good references; moderate salary; any capacity; London preferred. "Chemist," Exley House, Malton, Yorks.

QUALIFIED, 25, desires post as Manager or Assistant; Public School; 7 years' excellent experience; references; disengaged; Manchester or 30 miles. Sawyer, 104 Linaker Street, Southport.

QUALIFIED; 23; tall; abstainer; high-class Dispensing, Photographic and Counter experience, West-End, suburban and seaside; disengaged; permanency; London district. Oakley, 31 Knights Park, Kingston-on-Thames.

QUALIFIED lady, 25, experienced, desires post in London. "A. M. J.," 7 Etloe Terrace, Church Road, Leyton.

QUALIFIED, 27, Scotsman, single, as Manager, Assistant or Locum; London district preferred; disengaged; good all-round experience. "Statim," 18 Myddelton Square, E.C.1.

QUALIFIED, Scotch, 23, 6 ft. 1 in., desires post; 7 years' experience; excellent references. Apply, with particulars, Finlay McBeath, Pitlochry, Perthshire.

QUALIFIED, 23; tall; good address; skilled Dispenser, first-class Salesman, practical Photographer; all-round experience as Branch Manager; excellent references. A. C. Dutton, 153 Huddersfield Road, Halifax.

QUALIFIED Manager or Locum; good experience; last situation 4½ years; age 27; married; expert Dispenser and Prescriber; free now. R. H. Cater, M.P.S., 80 The Crescent, New Malden, Surrey.

QUALIFIED, 30; single; high-class Dispensing, Counter, Window-dresser, Photography, Optics; highest personal references; disengaged November 24; Leeds district preferred; interview; trial; salary £5 per week. "Salesman," 26 Sholebroke Avenue, Leeds.

QUALIFIED Assistant, age 22, with West-End experience, requires permanency in high-class London Pharmacy; disengaged; excellent references. B. Jones, 41 Coldershaw Road, Ealing, W.13.

QUALIFIED; age 45; Senior Assistant or Manager; London, Continental and provincial experience. Leek, The Ferns, Uttoxeter, Staffs.

QUALIFIED 3 years, 27, 5 ft. 7 in., capable, willing, trustworthy, excellent experience in all branches, seeks good permanency, Manager or Assistant; London preferably. "F. J. W.," 27a Lambrook Terrace, Fulham, S.W.6.

QUALIFIED lady, experienced Retail, fluent French, seeks post, West-End, New Year. Kindly state hours, salary, etc. Apply 129/39, Office of this Paper.

QUALIFIED Chemist; middle-aged; protection or small branch; terms reasonable. "Salol," 130/20, Office of this Paper.

RELIABLE, unqualified man, 29, good Dispensing experience, excellent Salesman, free now, desires post, S.W. London. "S.," 31 Clarence Road, Teddington.

TEMPORARY or permanency; competent, with experience in all class and branches; good references. "Chemicus," 162 Lloyd Street, Manchester, M.S.

WHOLESALE.

s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

AS Traveller; home or abroad; 33; good knowledge Tamil and Malay; sound experience Drugs and Chemists' Sundries, also 3½ years' rubber planting experience. M.L. 2811/24, Office of this Paper.

B.SC. (Lond.), Hon. Chem., A.R.C.S.; 2 years' research experience; 26; single; moderate salary to commence; will go abroad. M.L. 2469/24, Office of this Paper.

B.SC. (Hons. Chem.), 26, educated Public School, University, desires post in works on Research, Plant or Analytical; good knowledge Chemistry Physics, French, German, Book-keeping. M.L. 4467/22, Office of this Paper.

LABORATORY OR WORKS.—Assistant Chemist; 28; B.Sc. Inter.(Lond.); French fairly fluent, some German; scientific knowledge both languages; has had some commercial experience. 772/22, Office of this Paper.

MANUFACTURING or Wholesale Chemists.—Gentleman, 25, Hons. B.Sc. Chemistry, works experience, desires post at small salary to learn business, with view to investment and partnership. 130/30, Office of this Paper.

OIL Chemist, 28, B.Sc. (Hons. Chemistry), A.R.C.Sc., A.I.C.; good technical French; experienced Laboratory Chemist, Oilfields; 12 months' experience Research Work, Oil Technology Department. 44162/T.P., Office of this Paper.

PH.C., young, square trained, seeks progressive position in wholesale; hard worker; 10 years' experience; would go abroad later. 127/24, Office of this Paper.

TO DRUG, SUNDRY AND PACKED GOODS HOUSES.

TAKE the opportunity of the coming improvement in trade and employ as SALES MANAGER one who has had unique experience in the Wholesale and several successful years "on the road." Strong points: Control of travellers and their sales, departmental managers and costings, advertising. Highest references. P.C.B. 22/21, Office of this Paper.

WORKS' Chemist, 26, B.Sc. Technology (Manchester); French and German; 2 years' experience as Assistant to Pharmacist. 5800/23, Office of this Paper.

MISCELLANEOUS.

10s. for 60 words; 1s. for every additional 10 words or less.

The ADVERTISER may if preferred have replies addressed to this Office, and forwarded on payment of an additional charge of 1/-.

McADAM & TUCKNISS, Stock and Share Brokers, Westminster Bank Chambers, Blackheath, S.E.3. Established 1898. Telephone: 81 Lee Green. Shares for Sale, free of commission (subject):—115 W. J. Bush £5 x 5% Pfs., 65s. 9d.; 100 Brit. Glass, 2s. 6d.; 500 Bovril Australian Estates Pfd., 17s. 6d.; 100 Dental Mfg., 6s. 10½d.; 500 B. Laporte Ord., 24s.; 70 Parkes Drug Ord., 17s. 6d.; 178 Virol, 84s. 6d. Wanted (subject):—200 Beecham Ord., 20s. 4½d.; 100 Pfs., 20s. 9d.

CHEMIST'S Fittings (second-hand).—Ranges of Drug Drawers, Shelving, All Glass Counters, Centre Cases, Window Fittings of all descriptions. D. MATTHEWS & SON, Chemist Fitters, 14/16, Manchester Street, Liverpool.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 262 Old Street, London, E.C.2.

BROADBENTS, LTD., Southport, are open for an offer for a beautiful solid mahogany Chemist's Fixture, 23 ft. 6 in. long, in sections, easily adaptable, comprising nest of drawers, top portion cases and mirrored back.

FOR disposal, the Sole British Rights in certain Bio-chemical Products with standardised vitamin content; the preparations are open to any investigation. Apply in first instance to P.C.B. 22/25, Office of this Paper.

LIMITED Companies formed not only for Chemists and Opticians, but for any trade. Established 1905. Books, seal, etc., are included in quotation. Advice free. A. B. SLACK, 15 Christ Church Avenue, West Didsbury, Manchester.

PROFITS INCREASED.
SELL YOUR OWN RELIABLE PROPRIETARIES.

RETIRED Chemist will send particulars of 25 Money-making Preparations which have made a competency.
Thoroughly genuine lines sold on their merits with little advertising and paying exceptionally good profit.
Recipes, the outcome of 50 years' experience, quite easily prepared, and every one guaranteed to give satisfaction.
TOM BROOKS, 1 Oakhurst Avenue, East Barnet, Herts.

£144. SET of complete mahogany Shop Fittings, 7 ft. hand. some Dispensing Screen, 7 ft. Wall Case, 12 ft. Counter with cases in front, plate-glass Counter Case, two nests of Counter Drawers, 12 ft. Drug Fitting, Perfume Case and Desk, all-glass Counter; can easily be adapted. PHILIP JOSEPHS & SONS, LTD., 93 Old Street, London, E.C.1.

EXCHANGE COLUMN.

2d. per word: Minimum 2s.

FOR DISPOSAL.

7 FT. WICKER SPINAL CARRIAGE, hood, cover and stretcher, good condition, £6 10s.; similar, Maw's, 1/5497. 124/39, Office of this Paper.

DISPENSING SCALES, grooved short, stamped, complete with weights, 35s. 6d.; Pill Machine, 5 gr., Maw's 24's, 22s. 6d.; Suppository Mould, 15 gr., Maw's 12's, almost new, 17s. 6d.; carriage paid. Craingold, Chemist, Cheetham Hill Road, Manchester.

WANTED.

SECOND-HAND EMULSIFIER. Sutherland, Chemist, Wick, Scotland.

PHARMACEUTICAL Books wanted; send priced list. Gower, Bookseller 41 Voltaire Road, Clapham.

PHOTOGRAPHIC COPYING MACHINE, "Photostat" or similar type. State fullest particulars, print size, lighting outfit, etc., and price. 54/676, Office of this Paper.

REQUIRED SHORTLY, complete up-to-date Fittings for a Retail Pharmacy (mahogany preferred); view in or near London. Reply, "G. W.," 130/28, Office of this Paper.

THE CHEMIST'S COMPACT LIBRARY

MONEY-MAKING AND MONEY-SAVING BOOKS

Every Book by an Expert

Pharmaceutical Formulas

Being the "Chemist and Druggist's" book of useful recipes for the drug trade. By PETER MACEWAN, Pharm. Chem., F.C.S. Ninth edition, containing over 1,050 pages.

Price **15s.** *net, by post* **15s. 9d.**

The Art of Dispensing

A treatise on the Methods and Processes involved in Compounding Medical Prescriptions, with Dictionaries of Incompatibles and New Remedies, and numerous Memoranda for Dispensers and Prescribers. (Ninth Edition.) By PETER MACEWAN, F.C.S., Pharm. Chem. Contains 596 pages.

Price **8s.** *net, by post* **8s. 6d.**

Veterinary Counter Practice

An indispensable book for chemists, whether urban or rural. It deals with the ailments of horses, cattle, sheep, pigs, dogs, and poultry. The seventh edition, like its predecessors, is by an experienced M.R.C.V.S. Contains 440 pages.

Price **7s. 6d.** *net, by post* **8s.**

Chemists' Windows

An illustrated treatise on the art of displaying pharmaceutical and allied goods in chemists' shops windows, with Chapters on ticket writing, the mechanics of moving devices, and business-promoting accessories. Contains 216 pages and 200 illustrations.

Price **3s. 6d.,** *by post* **3s. 9d.**

Diseases and Remedies

Chemists and Druggists need to know something about diseases and their treatment, and this book fills the gap between books of domestic medicine and standard works for medical practitioners. (Fifth Edition). Contains 264 pages.

Price **5s.** *net, by post* **5s. 3d.**

Guide to Preliminary Examinations

Deals with English, Latin, Arithmetic, Algebra, Euclid, and French, as required in the principal examinations recognised by chemical, medical, and pharmaceutical bodies.

Price **3s. 6d.** *net, by post* **3s. 9d.**

Minor Experiences

Gives over fifty candidates' descriptions of the Minor Examinations as conducted by the Boards of Examiners in London and Edinburgh, prefaced by the official syllabus and other useful information. Indispensable to all chemists' apprentices and assistants who have not qualified, as it is the only book giving the questions and work of the Examination. Contains 116 pages.

Price **2s. 6d.** *net, by post* **2s. 8d.**

Practical Methods of Urine Analysis

This department of chemistry is one which those behind the drug counter can profitably cultivate. The object of this book is to give chemists exactly the information they want on the subject. The book is written by a working pharmacist who is expert in the subject, and has been revised by a M.B., Lond. (Third Edition.)

Price **3s. 6d.** *net, by post* **3s. 8d.**

The Chemists' Dictionary of Medical Terms and Treatment

This book measures 5¾ inches by 3½ inches, and contains 308 printed pages. There is no medical dictionary so compact which gives so much up-to-date information. It goes straight to the point—which is what chemists most need when they have to answer medical questions asked by customers.

(Reprinting.)

The Chemists' Dictionary of Synonyms and Trade Names

Uniform with the "Chemists' Dictionary." Contains 220 pages.

(Reprinting.)

Provincial Hospital Pharmacopœias

Uniform with the "Chemists' Dictionary," contains 296 pages and consists of formulas for medical prescriptions used in twenty-two hospitals and infirmaries in Great Britain outside the London district.

Price **3s.** *net, by post* **3s. 2d.**

Wootton's Chronicles of Pharmacy

In two vols., maroon cloth, comprising 770 pages.

Price **10s. 6d.** *net, by post* **11s. 3d.**

¶ **FOREIGN CORRESPONDENTS are requested to note that the postage is 2d. extra for each book**

May be obtained at the published prices from the Wholesale Drug or Sundries House, or from

THE CHEMIST & DRUGGIST, 42 CANNON ST., LONDON, E.C.4

Branch Offices: MELBOURNE and SYDNEY, AUSTRALIA; 49 County Buildings, Manchester; 54 Foster's Buildings, Sheffield.

Printed for the Proprietors by THE AVENUE PRESS (L. UPCOTT GILL & SON, LTD.), 55 to 57, Drury Lane, W.C.2, and Published by the Proprietors, Morgan Brothers (Publishers), Ltd., at 42 Cannon Street, in the City of London.—Nov. 15, 1924.

Apathy

Of all the phases of experience both manufacturer and retailer are up against, the biggest problem is apathy. By "apathy" we of course mean that don't care, not interested feeling which is the antipode of progress.

Here is an actual experience. A lady asks her pharmacist for a bottle of Elfrida Perfume. He pretends not to know of it, but admits having been asked for Elfrida Preparations several times, and asks if she knows the name of the maker.

A real funny man, wasn't he? but wasted upon the good lady, who went back home, found the Elfrida Perfumery Co., Rawdon near Leeds, on her hubby's bottle of Hair Cream, which address she gave to the chemist. But don't let us miss the real point of this: she also wrote to us and told us this story, at the same time asking for a list of Elfrida Preparations, which we duly forwarded. By return came an order accompanied by the cash for—

4 5/- bottles Perfume	1 3d. Face Cream
1 9d. bottle Perfume	1 3d. Face Powder

Surely there is a big moral in all this. Apathy is simply business atrophy. We are all in business to give service, to make profit, and at the same time to build up goodwill for ourselves and the craft.

Elfrida Toilet Preparations bring goodwill to the pharmacist, they are his toilet series and carry handsome profit on every line, they are excellent in quality, unique in get up, extremely popular and everything is being done for them to bring back trade to you in toilet specialties which you are losing to others. Some thousands of pharmacists are Elfrida enthusiasts. Don't be one of the few who are not.

Have you seen the new 3d. Elfrida Hand Tablet?
It looks like being as big a seller as the 3d. Cream!

W. B. CARTWRIGHT LIMITED . RAWDON NEAR LEEDS

TO WHOLESALE & EXPORT TRADES. ESTABLISHED 1844.

Extracts
Tinctures in Bond

RANSOMS

Resins
Essential Oils

WILLIAM RANSOM & SON, LTD.

MANUFACTURING PHARMACEUTICAL CHEMISTS.
Distillers of Essential Oils and Cultivators of Medicinal Plants.

HITCHIN, near LONDON.

Telephone: 95 HITCHIN

MORE SALES MEAN MORE PROFITS

"Keep busy on Cocoa"

BOURNVILLE

SEE THE NAME "CADBURY" ON EVERY PIECE OF CHOCOLATE

WYLEYS'

NEURACETIN PELLETS

Introduced in 1897, and since proved safe and reliable.
Action: Antipyretic, Analgesic, Anti-neuralgic, Anodyne.

Wyleys Limited, Coventry.

SANTONIN B.P.14. U.S.P.IX. J.P.IV

THE ONLY SAFE RADICAL CURE FOR INTESTINAL WORMS

Recognised for nearly a Century by the Medical and Veterinary Professions throughout the World.

THE CHEAPEST ANTHELMINTIC IN PRACTICE; ABSOLUTELY HARMLESS; 100% EFFECTIVE

Occasional administration of SANTONIN ensures complete freedom from worms; stimulates the nervous system and corrects urinary disorders.

RUSSIAN WORMSEED

Containing not less than 2% SANTONIN.

THE EASTERN & RUSSIAN TRADING CO., LTD.

8 DRAPERS GARDENS, LONDON, E.C.2.

CABLES: Taarinco, London. 'PHONE: London Wall 4391.

EXCLUSIVE OFFICIAL DISTRIBUTORS of the GENUINE SANTONIN and RUSSIAN WORMSEED to the whole world (for the U.S.S.R.).

Printed for the Proprietors by THE AVENUE PRESS (L. UPCOTT GILL & SON, LTD.), 55 to 57, Drury Lane, W.C.2, and Published by the Proprietors, Morgan Brothers (Publishers), Ltd., at 42, Cannon Street, in the City of London.—November 15, 1924.